THE INFLUENCE OF BIBLIOTHERAPY ON CHILDREN'S ATTITUDES TOWARD PEERS WHO USE AUGMENTATIVE AND ALTERNATIVE COMMUNICATION

by

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ABSTRACT

This study investigated the effects of a single bibliotherapy intervention on the attitudes of first grade children toward peers who use augmentative and alternative communication (AAC). Seventy-one children, ages 6 and 7, participated in either (a) the experimental group, where they heard and discussed a book that featured a child who used AAC, or (b) the control group, where they heard and discussed a book featuring a child who did not use AAC. Participants then completed the AAC Acceptance Scale for Children. Postintervention, the experimental group demonstrated significantly more negative attitudes in the affective and behavioral domains of attitude. Findings suggest the importance of teacher education about the efficacy of single use bibliotherapy, and the need for future research regarding elimination of attitudinal barriers toward individuals who use AAC.

This dissertation is dedicated to my wonderful daughters, Alexa and Emmy.

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CHAPTER I

INTRODUCTION

Approximately 3.5 million individuals in the United States have a severe communication disorder and rely on augmentative and alternative communication (AAC) systems to communicate (Beukelman & Mirenda, 2005). AAC is a means of communicating using strategies that supplement or replace an individual's verbal or vocal abilities. AAC can be unaided (use of one's body) or aided (i.e., pictures, communication boards, or electronic speech generating devices). AAC is used by individuals of all ages, socioeconomic groups, and ethnicities, and it is used with a variety of communication disorders, physical disabilities, and cognitive disabilities (Beukelman & Mirenda, 2005). Some people will use AAC for a short amount of time, while others will use it throughout their lifetimes (International Society for Augmentative and Alternative Communication, 2004).

Negative attitudes toward individuals who use AAC can greatly affect the users' success of communication and their overall participation in society (McCarthy & Light, 2005). In children, attitudes of peers play a strong role in the formation of self-image. How a child "perceives himself or herself will influence every experience he or she has" (Shapiro, 1999 p. 268). Unfortunately, attitudinal barriers against individuals with disabilities are prevalent in our culture. These barriers lead to development of stereotypes, discrimination, and may ultimately limit an individual from achieving his or

her full potential (National Collaborative on Workforce and Disability/Youth, 2008). General attitudes toward individuals with disabilities and attitudes toward individuals who use AAC are often similar (Huer & Lloyd, 1990). People who use AAC have identified determining "ways to increase public awareness and improve attitudes regarding AAC" (O'Keefe, Kozak, & Schuller, 2007, p. 94) as a research priority.

The purpose of this chapter is to review literature regarding attitudes, AAC, and bibliotherapy. It is organized into three sections. In the first section, general attitudinal research (consisting of information regarding attitude functions, formation, and measurement) is reviewed. This section also summarizes research related to attitudes toward individuals with disabilities, including individuals who use AAC. In the second section, a historical background of bibliotherapy is presented, followed by a review of research regarding the effect of bibliotherapy on attitude change. Methodological problems in existing bibliotherapy research are explored and developmental bibliotherapy and steps for implementation in the classroom are detailed. The chapter concludes with the research question.

Attitudes

General attitudinal research

How attitudes are formed and their relationships to actions have long been studied in attempts to understand human development and behavior. The research is voluminous and spans multiple disciplines including psychology, social psychology, sociology, political science, philosophy, communication, and anthropology (Oskamp & Schultz, 2005). Complex theories have been developed, matured, and changed in the quest to quantify aspects of attitude. Oskamp and Schultz (2005) have provided a simple

definition of an attitude as "a predisposition to respond in a favorable or unfavorable manner to a particular object or class of objects (p.17)."

Attitudes serve a function in people's daily lives. The idea of attitude functions was originally proposed by Katz (1960), and subsequent research has supported his findings (Oskamp & Schultz, 2005). Katz identified four functions that attitudes perform for individuals: (a) adjustment, (b) ego-defense, (c) value-expression, and (d) knowledge. The adjustment function refers to how individuals strive to "maximize the rewards in their external environment and to minimize the penalties" (Katz, 1960, p. 170). The ego-defense function uses defense mechanisms to help people protect themselves from examining difficult realities. Value-expressive attitudes allow individuals to express their attitudes congruent with their values and self-concepts. The knowledge function serves to provide a frame of reference to help individuals understand and give meaning to their environments.

Fabrigar, MacDonald, and Wegener (2005) summarized attitudinal research findings, concluding that formation of attitudes is based on a combination of three components: affect, behavior, and cognition. The interaction of these variables may influence both attitude formation and change (Oskamp & Schultz, 2005). There are differing theories on the specific relationships and roles of affect, cognition, and behavior. Theories include the tri-componential viewpoint, the separate entities theory, and the latent process concept.

The historical tri-componential viewpoint contends that an attitude is a single entity composed of interrelated affect, behavior, and cognition. Affect refers to how an individual feels toward an object (i.e., "Seeing dogs is fun"). Behavior refers to an

individual's actions toward the object (i.e., "I pet dogs every time I see one"). Cognition refers to the facts, ideas, and beliefs that an individual holds regarding the object (i.e., "Dogs are friendly"). The tri-componential theory has been criticized in that in order to form a single entity, all three components must be highly consistent with one another. This is not always the case. Additionally, not all attitudes result from all three components (Oskamp & Schultz, 2005).

The separate entities theory (Fishbein & Ajzen, 1975) challenges the relationship idea of tri-componential theory. As the name indicates, separate entities theory holds that attitudes (affect), behavioral intentions, and beliefs (cognition) are separate entities that, depending on circumstances, may or may not be connected. A drawback of this theory is that it may oversimplify attitudes since the term attitude refers only to the affective dimension (Oskamp & Schultz, 2005).

The latent process concept of attitude formation, originally proposed by DeFluer and Westie (1963), contends that an attitude is an intervening variable, made up of any combination of affective, behavioral, and/or cognitive processes. After an observable stimulus event, the inferred attitude serves as a latent process that, although not observable, ultimately gives rise to an observable outcome, consisting of cognitive responses, affective responses, and/or behavioral responses. The latent process theory has advantages over both the tri-componential and separate entities theories in that it does not require congruence of attitude components, nor does it oversimplify the process (Oskamp & Schultz, 2005). It allows for flexibility in the combination of processes and subsequent observable responses that may result after a stimulus event. This is the theoretical basis for attitudinal processes for this paper and research.

Attitude is shaped by long-term socialization and by temporary, short-term exposure to aspects of one's environment (Albarracin, Johnson, Zanna, & Kumkale, 2005). In the latent process viewpoint, these exposures influence the cognitive, affective, and behavioral latent processes. Experiences can either be through direct personal experience or through indirect or vicarious experience. Direct personal experiences tend to result in the formation of stronger attitudes, either positive or negative, and are more likely to influence behavior (Oskamp & Schultz, 2005).

The formation of children's attitudes is highly influenced by family and groups. Parental influence is greatest with young children. Schools play the next strongest role, followed (both by chronological age and by level of importance) by peer groups. Finally, reference groups, such as movie stars or cliques one is not a member of, and mass media finish out the hierarchy of influences (Oskamp & Schultz, 2005).

The link between attitudes and behaviors is an area that continues to be researched. Individuals' actions do not always reflect verbal reports of attitudes (Antonak & Livneh, 2000; Oskamp & Schultz, 2005). Reports of attitudes can be characterized as a verbal behavior, which may in turn be in discordance with observed behavior. This can be due to individuals' interpretation of scales, desire to respond in a way that they believe will please the intended audience, question comprehension, scale interpretation, and/or standards of comparison used (Fazio, 2007).

However, reported attitudes have been shown to both predict and influence behavior (Albarracin et al., 2005; Fazio, 2007). Therefore, changing attitudes has the potential to change behavior. It is important to note that a self-report of a positive attitude toward individuals with disabilities does not guarantee a corresponding behavioral

response. The question of how best to change attitudes, and how this relates to behavior, makes up the majority of attitudinal research and has resulted in a myriad of theoretical constructs. Attitudinal change research continues to be an active and important research area (Oskamp & Schultz, 2005).

Measurement of attitudes

The measurement of attitudes and attitudinal change can be done via either direct or indirect methods. Indirect methods of attitude assessment include physiological testing, nonobtrusive behavioral observations, disguised techniques where participants are purposefully deceived as to the nature of the measurements, and projective techniques where participants know they are being studied but do not know the specifics of the situation (Antonak & Livneh, 2000).

Direct methods are the most frequently used in measurement of attitudes toward individuals with disabilities. Direct methods are based on participant self-reports and may consist of opinion surveys (structured and unstructured), interviews (structured and unstructured), ranking, adjective checklists, paired comparison, semantic differential scales, summated rating scales (Likert-type), and social distance scales (Antonak & Livneh, 2000). Of these direct methods, Likert-type scales are utilized most frequently (Oskamp & Schultz, 2005).

Due to the volume of research and preponderance of scales developed to measure attitudes toward individuals with disabilities, Antonak and Livneh (2000) recommend the use and/or adaption of existing measurement scales with sound psychometric properties. Additionally, it is important to consider if all three components of attitude (cognitive,

affective, and behavioral) are being measured (Vignes, Coley, Grandjean, Godeau, & Arnaud, 2008).

A review of the existing scales used to measure attitudes toward individuals who use AAC revealed that all scales to date have been Likert-type. Instruments have included ones designed to measure attitudes toward individuals with all types of disabilities, ones specifically focusing on individuals who use AAC, and ones aimed at teachers, parents, college students, or preadolescent children (McCarthy & Light, 2005).

Unfortunately, there are limited instruments appropriate for measuring the attitudes of children first grade and younger toward peers who use AAC. The Assessment of Attitudes Toward Augmentative and Alternative Communication (AATAAC; Beck, Fritz, Keller, & Dennis, 2000) has been successfully used with elementary age children (grades 1-5) to measure attitudes toward peers who use AAC. It is a 5-point Likert-scale and consists of 26 items. The questions assess affective, behavioral, and cognitive components of attitude. The AATAAC has been used in several studies (Beck, Fritz et al., 2000; Beck, Bock, Thompson, & Kosuwan, 2002; Beck, Kingsbury, Neff, & Dennis, 2000; Dudek, Beck, & Thompson, 2006) and the authors demonstrated test-retest reliability, internal consistency, content validity, concurrent validity, and construct validity for the scale. However, a 5-point rating scale, and the complexity of some of the questions, may make the AATAAC difficult for some first grade children to complete.

Although not specific to AAC, the Acceptance Scale for Kindergarteners – Revised (ASK-R) has been successfully used to measure attitudes of young children toward peers with disabilities (Favazza & Odom, 1999). The ASK (Favazza & Odom, 1996) and the further tested ASK-R are 3-point Likert scales and have established

reliability, content validity, and criterion-related validity. The questions in the ASK-R address both behavioral and affective components of attitude. In Favazza and Odom's studies (1996, 1997) the cognitive components were addressed via post-interview questions.

Attitudes toward individuals with disabilities

Children's attitudes toward peers with disabilities have been shown to form in children as young as age 3 (Longoria & Marini, 2006). If a child holds a negative attitude toward a peer, he or she will likely view that child's behaviors as negative, resulting in a perpetuating cycle (Hymel, 1986). Children who use AAC are particularly at risk as they already have fewer communicative opportunities than their peers (Light, 1989), and communication is imperative in developing friendships and social relationships. People with disabilities often identify that the largest barrier they face is not their disability but the attitudes of others (Shapiro, 1999).

A Kessler Foundation and National Organization on Disability (NOD) survey of Americans with disabilities (2010) examined 13 quality of life indicators of people with disabilities, and gaps between people with and without disabilities. The largest gap was found in employment, with only 21% of working age individuals with disabilities reporting employment, versus 59% of people without disabilities. People with disabilities were more likely to be living in poverty, and less likely to have access to technology. Barriers to social and leisure activities were also identified. Unfortunately, over the past 20 years there has not been significant progress in closing the gaps. Negative attitudes toward individuals with disabilities have been identified as a contributing factor leading to these discrepancies (NOD, 2000).

Defining what a positive attitude toward individuals with disabilities consists of is important. It is more than just "being nice and helpful," which can result in demeaning a person with a disability (Makas, 1988). Contemporary critical disability theorists contend that the key is to "pay attention to difference without creating a hierarchy of difference" (Devlin & Pothier, 2006, p. 12).

School systems have been identified as a forum for addressing and changing attitudes towards people with disabilities. As previously identified, schools are secondary only to parents in their influence on the attitudes of children. Unfortunately, there is a lack of research regarding the type and frequency of interventions that teachers and schools are specifically implementing to address disability awareness and promote positive attitudes. In a study of New York elementary school teachers, Gordon (2008) found that the majority of teachers identified that improving attitudes toward individuals with disabilities was very important and reported that they had incorporated some aspect of disability awareness into their teaching. However, most did not use a structured curriculum, and identified reasons for not doing so as a lack of time and lack of training related to disability. In order to "facilitate genuine social integration, it is critical to train regular teachers to become actively involved in the preparation of their non-disabled students in understanding and developing positive attitudes toward their peers with disabilities" (Shapiro, 1999, p.7), including peers with disabilities who use AAC.

Attitudes toward individuals with disabilities who use AAC

McCarthy and Light (2005) reviewed the findings of 13 studies regarding attitudes toward individuals who use AAC. These studies included published research and doctoral dissertations from 1980 to 2002 and involved typically developing children

or undergraduate students watching a video consisting of an individual who used AAC interacting with a typically developing peer. The videos used across the 13 studies differed in how much was shown of the body of the person using AAC and the studies examined a range of variables related to the individuals viewing the videos in relation to attitudes toward AAC. These variables included gender, age, experience with individuals with disabilities, reading level, and perceived similarity of the rater to the person using AAC. Additionally, some of the studies looked at characteristics of the individual depicted using AAC and the type of AAC system. In all studies, attitudes were measured by self-reported responses on Likert-type scales following the viewing of the video.

Effects of characteristics of typically developing individuals. Overall, females reported more positive attitudes toward AAC users than their male peers (Beck et al., 2002; Beck & Dennis, 1996; Beck, Fritz et al., 2000; Beck, Kingsbury et al., 2000; Blockberger, Armstrong, O'Conner, & Freeman, 1993; Gorenflo, Gorenflo, & Santer, 1994; Lilienfeld & Alant, 2002). A more recent study by Dudek et al. (2006) supported these previous findings.

The age of children appears to be a factor in attitude toward AAC users. Third grade children indicated more positive attitudes than their fifth grade peers (Beck, Fritz et al., 2000). However, when Beck et al. (2002) compared children closer in age, grade four and grade five, no significant differences in attitudes were found.

Children who attended integrated, disability inclusive schools reported more positive attitudes (Beck & Dennis 1996; Beck, Kingsbury et al., 2000), as did children with higher reading comprehension scores (Blockberger et al., 1993). Undergraduate students who were the same gender as the person using AAC, and who perceived a

similarity with that individual, also demonstrated more positive attitudes (Gorenflo & Gorenflo, 1997).

Effects of characteristics of individuals who use AAC. The competency level (as defined by conversational response time and prompts needed) of the person using AAC did not result in any difference on observer attitudes of fourth and fifth grade children (Beck, Bock et al., 2002). Differences were also not found when the age of the individual using AAC was depicted as a child or as an adolescent (Macke, 1992).

When the role of message length on attitudes of children in schools without integrated peers with disabilities was examined, Beck, Kingsbury et al. (2000) found third and fifth grade students to have more positive attitudes when they viewed production of two to four word messages versus a single word message. However, length of the message was not a factor with the same age children in disability-integrated schools.

Effects of characteristics of the AAC system depicted. The use of light-tech systems versus static screen high tech voice output communication does not appear to influence attitudes toward individuals who use AAC (Beck et al., 2002; Beck & Dennis, 1996; Beck, Fritz et al., 2000; Blockberger et al., 1993; Dada & Alant, 2002). Dudek et al. (2006) further supported these findings when they found no significant difference between the influence of static screens versus dynamic screens on the attitudes of children in grades three and five.

When examined in combination, these studies have contributed knowledge about factors that may influence attitudes. However, McCarthy and Light (2005) noted a lack of studies investigating strategies for changing negative attitudes towards individuals who

use AAC. One notable exception is a study by Beck and Fritz-Verticchio (2003) in which the influence of children in second, fourth, and sixth grades learning about AAC from a 16 minute videotape and then role playing being nonspeaking was examined. The videotape was commercially produced and featured children ranging in age from preschool to high school age. The children in the video were shown using different types of AAC (low tech to electronic) across a variety of community, school, and home settings. The role-play component consisted of the students playing the card game Go Fish using nonelectronic communication boards. They found that the oldest children's and all ages of boys' attitudes toward people who use AAC were more positively influenced by the opportunity to role-play. The authors postulated that role playing assisted the older children in their cognitive process of assimilating what it is like to use AAC, thus increasing their empathy and reported attitudes. The younger children (second grade) may not have yet developed the necessary cognitive skills to benefit from the role-play. These findings support the need for more research exploring intervention strategies for effectively and efficiently influencing attitude change of younger children toward peers who use AAC. One intervention strategy that may be effective, as well as efficient, is bibliotherapy.

Bibliotherapy

Bibliotherapy is a practice about which both research based and anecdotal claims have been made regarding its role in changing attitudes. Bibliotherapy can be simply defined as the use of books to help individuals solve problems (Aiex, 1993). The history of bibliotherapy can be traced to ancient Greece, with Aristotle recording the therapeutic idea of reading and emotional catharsis, and the Library at Thebes bearing the words

"The healing place for the soul" (Pehrsson & McMillan, 2005). In 1916, Samuel Crothers gave name to the practice, coining the term bibliotherapy (Pardeck, 2005), which is derived from a combination of the Greek words for therapy and books. Bibliotherapy was first used as a treatment modality through hospital libraries in the early 1900's. By World War I, bibliotherapy was further established to help hospitalized World War I veterans recover both physically and emotionally (Pehrsson & McMillan, 2005).

Caroline Shrodes' dissertation in 1950 set the stage for modern bibliotherapy with her introduction of a series of steps that readers move through in the bibliotherapy process. The first step, identification, consists of the reader identifying with book characters and the presented situations. The reader then moves through a stage of catharsis (tension relief), and ultimately gains insight, which can then be applied in his or her own life (Riordan, Mullis, & Nuchow, 1996). Based on these psychodynamic concepts, the focus of bibliotherapy in the 1950's and 1960's shifted to a model of therapeutic intervention by trained therapists (Lenkowsky, 1987). The psychodynamic model is still the basis for bibliotherapy today when fictional literature is being used. When using fictional literature bibliotherapy with young children, the focus is on identifying with characters and finding solutions to problems, as young children are not cognitively capable of experiencing the same level of catharsis and insight as older readers (Pardeck & Pardeck, 1993). When bibliotherapy involves self-help books, a cognitive-behavioral model is more likely to be used (Pehrsson & McMillan, 2005). In the cognitive-behavioral model, clients read specifically selected self-help books and then practice the techniques presented, thus changing the way they think and behave (National Association of Cognitive Behavioral Therapists, 2009).

Bibliotherapy has been used across a variety of disciplines, including medicine, psychology, counseling, social work, library sciences, nursing, and education. This has led to confusion regarding the practice as each discipline tends to both define and use bibliotherapy in a manner that best complements its profession (Aiex, 1993). Depending on the setting, bibliotherapy may also be referred to as bibliocounseling, bibliopsychology, biblio-linking, biblio-matching, bookmatching, literatherapy, library therapeutics, guided reading, and biblioguidance (Pehrsson & McMillen, 2005). Although differences in definition and use of bibliotherapy exist across disciplines, there is a body of research examining its efficacy in attitude change.

Bibliotherapy and attitude change

There are mixed findings in regards to bibliotherapy and its effect upon attitudes. Older research (Jackson, 1944; Litcher & Johnson 1969; Standley & Standley 1970; Zucaro, 1972) reported positive changes in attitudes toward black people after developmental bibliotherapy type interventions. However, some subsequent research has failed to support these findings. Specifically, differences were not found in peer attitudes toward children with physical disabilities (Agness, 1980; Beardsley, 1981; Penney, 1990), the elderly (Zeleznick, 1985), black people (Hines, 1984), or children with cognitive disabilities (Smith-D'Arezzo & Moore-Thomas, 2010) after bibliotherapy interventions. However, the studies by Beardsley, Hines, and Zeleznick consisted only of reading books and did not include any type of follow up activities or discussion. This is an important distinction as it is accepted practice in bibliotherapy to include a discussion or activities component after reading the book.

Although they utilized discussion, Penny (1990) and Agness (1980) both identified concerns regarding weaknesses with the measurement scales used (Attitudes toward Disabled Persons scale [ATDP]). Additionally, in Penny's research the students viewed a slide and tape presentation entitled "Year of the Disabled" prior to taking the ATDP, which may have prompted changes in attitude prior to the bibliotherapy. The students in the study also attended schools where children with disabilities attended, so they may have already shifted to more positive attitudes due to prior interactions.

In Agness' (1980) study, the books selected and the follow up questions may have affected the outcomes. It is an older study and negative terms such as "spastic" are used, and stories focus on individuals with disabilities that are institutionalized. The follow up questions focus on disability specific frustrations and included questions such as "What reasons did he have to feel sorry for himself?"

A small sample size of 14 may have impacted and limited Smith-D'Arezzo and Moore-Thomas' (2010) research focusing on guided reading to change fifth grade children's perceptions regarding peers with cognitive disabilities. The authors noted the importance of continued research in the area.

In contrast, Favazza and Odom (1997) successfully utilized bibliotherapy (including discussion) to promote positive attitudes of kindergarteners toward people with disabilities. They designed and used the previously discussed ASK scale for measurement. In their experimental study, kindergarten children were put in three groups delineated by amount of exposure to individuals with disabilities: (1) no-contact group, (2) low-contact group, and (3) high-contact group. The only intervention for the low-contact group was that they saw children with disabilities in the school. The high-contact

group heard stories with content relating to children with disabilities and prosocial behavior. These children then participated in guided discussions. The discussions focused on story content, disabilities, highlighting similarities, equipment introduced in the story, and incorporating specific playtime experiences. Additionally, the high-contact group participated in structured free play activities with children with disabilities, and they took home a copy of the previously read book to read with their parents at home. The high-contact group showed a significant differential change in acceptance toward people with disabilities. The no-contact and low-contact groups' pre- and posttest scores were low and were not significantly different from each other.

In 2000, Favazza, Phillipsen, and Kumar replicated Favazza and Odom's (1997) study. However, in this study they measured individual components of the intervention. Kindergarten children were placed in four groups: (a) whole intervention group, (b) play only group, (c) stories only group, and (d) control group. The children in the whole intervention group had the most significant short- and long-term gains in acceptance toward peers with disabilities. However, those in the play only group and stories only group also showed significant short-term gains. Based on these finding, the authors identified the need for further research regarding the use of books in the classroom and home to positively influence attitude change.

Unfortunately, in many instances, there may be limited opportunities for children to interact with individuals with disabilities. One way to expose children to individuals with disabilities is through extended contact. Extended contact theory builds upon Allport's (1954) intergroup contact hypothesis. Allport identified the interactions between ingroups and outgroups, and the conditions that needed to be met to positively

change attitudes. These conditions include (a) equal status, (b) common goals, (c) acquaintance potential, and (d) support of authorities, law, or customs. With the extended contact hypothesis, Wright, Aron, McLaughlin-Volpe, and Ropp (1997) expanded the intergroup contact hypothesis to include intergroup attitude change based on members of the ingroup knowing that an ingroup member had a relationship, or friendship with a member of the outgroup. Extended contact can decrease the anxiety or negative emotions in individuals that might occur with direct contact, instead allowing them to vicariously experience contact with an outgroup (Cameron, Rutland, Brown, & Douch, 2006). The extended contact theory has been successfully used with bibliotherapy and attitude change toward children with disabilities.

Cameron and Rutland (2006) based their research on the idea that extended contact via books can be used when there is little opportunity for children to have direct contact with people with disabilities, or used to introduce the idea of friendship with children with disabilities. Children age 5 to 10 were randomly assigned to three groups: neutral, decategorization, and intergroup. For 6 weeks all groups heard books featuring children without disabilities and their friendships with children with disabilities, followed by discussion. The focus of the stories and discussion varied between groups. In the neutral group, there was no emphasis on either group membership or individual aspects of the characters. In the decategorization group, the emphasis of the stories was on individual identities of characters. The intergroup children heard stories and discussion focused on category memberships and the typicality of the characters to the group they belonged to. An example of an intergroup discussion question was “How many real disabled children are like/similar to the disabled children we read about in the stories?”

(p. 479). The intergroup children showed the greatest change in attitudes. The authors surmised that the emphasis on perceived typicality led to attitude generalization from the contact situation (book and discussion) to individuals with disabilities as a whole group.

Extended contact interventions via bibliotherapy were also successful in a study that examined the attitudes of British children, ages 5 – 11, toward refugees (Cameron et al., 2006). The bibliotherapy interventions involved reading three stories over six sessions, followed by discussions. Participants were assigned to either the control group or one of three intervention groups: decategorization, common ingroup identity, or dual identity group. In the decategorization group, the emphasis was on individual characteristics of the characters that were refugees in the stories. The common ingroup identity group focused on the similarities between the groups. The dual identity group focused on both the similarities and differences between the groups. Although significant positive increases in attitude were shown in all the intervention groups, the dual identity extended contact group was the most successful.

The concept of providing vicarious experience via bibliotherapy has the potential to be effective in regards to influencing attitudes of typically developing children toward peers who use AAC. Typically developing children (ingroup) may not have the opportunity to interact with individuals who use AAC (outgroup). Using bibliotherapy could serve to introduce and normalize the use of AAC. This extended contact might align with formation of attitude functions (Katz, 1960) that lead to positive attitudes toward people who use AAC. Specifically, if children are comfortable with the idea of friendships with peers who use AAC and view individuals who use AAC positively as a

group, this may serve as a knowledge function and therefore, form a positive frame of reference toward people who use AAC.

Although a number of studies exploring the efficacy of bibliotherapy exist, there are several challenges that make it difficult to interpret this body of research as a whole. Specifically, with the exception of the previously discussed research, many of the claims in the field of bibliotherapy are subjective and anecdotal. Authors appear to be basing statements of efficacy on how they feel bibliotherapy will influence thinking and behavior, not on empirical evidence (Lenowsky, 1987; Smith-D'Arezzo & Moore-Thomas, 2010). Furthermore, variations in procedures across studies make interpretation of this body of research challenging.

Procedural variations that hinder the interpretation of bibliotherapy research

One challenge that results in difficulty in interpreting the efficacy of bibliotherapy is that the types of literature used in bibliotherapy have been varied and have included didactic as well as imaginative texts. Didactic text refers to self-help literature that specifically promotes new behaviors while imaginative literature is fictional writing with a bibliotherapy goal of personal insight. These two very different types of literature have been mixed in research exploring the effect of bibliotherapy. This mixing has led to incorrect conclusions regarding composite efficacy (Riordan et al., 1996), as the processes, goals, and outcomes are not the same, and therefore, the two types need to be separately identified and studied.

Another challenge when reviewing bibliotherapy research is determining which type of bibliotherapy is being enacted. Clinical bibliotherapy consists of therapeutic

interventions by trained mental health professionals to deal with serious behavioral or emotional problems. Developmental bibliotherapy can be undertaken by teachers and those not trained in the mental health profession to promote growth and normal development with an essentially emotionally healthy group, such as a classroom of children (Pehrsson & McMillan, 2005). These two types of bibliotherapy are inherently quite different and should not be classified as the same thing in research and when interpreting efficacy.

A final concern that makes it difficult to evaluate the efficacy of bibliotherapy relates to variability across studies in the stated goals of bibliotherapy and lack of specificity with regard to the procedures used in implementation. Many studies of bibliotherapy have not clearly defined the purpose of the practice (i.e., education, encouragement, empowerment, enlightenment, engagement, and/or enhancement of issues being addressed in therapy) and the steps involved, and instead have included bibliotherapy as an adjunctive option in a varied and comprehensive therapeutic intervention or, in the classroom setting, as part of educational curriculum. This leads to difficulty in determining to which aspect of the intervention changes may be attributed (Riordan et al., 1996).

Implementing a developmental bibliotherapy program

When planning a bibliotherapy program, Doll and Doll (1997) suggest that interventionists should attend to goals, professional responsibilities, media selection, follow up activities, and potential adverse responses.

Goals. Goals of developmental bibliotherapy programs can be diverse. They may

include self-understanding, emotional catharsis, promotion of relationships with others, building skills to meet day-to-day problems, behavior change, and/or gain in information and knowledge (Doll & Doll, 1997). In a classroom developmental bibliotherapy program to influence attitudes toward peers who use AAC, the goals might be to increase understanding about AAC and people who use it and to present individuals who use AAC positively as a group.

Events may occur that might limit the effectiveness of a developmental bibliotherapy intervention. One concern is that children may fail to identify with the characters and instead project their own beliefs and motives onto the characters. In turn, their own perceptions and solutions may be reinforced. If the children discount the characters' actions, or are defensive, they may end up using the characters as scapegoats (Gladding & Gladding, 1991).

Professional responsibilities. The qualifications of the individual conducting bibliotherapy should also be considered. There has been debate over who is qualified to conduct bibliotherapy (Doll & Doll, 1997). Ultimately, the facilitator needs to be well informed regarding human development and problems that may arise as people transition through developmental stages. It is important that the individual presents the book in a manner that engages the children. Depending on the children's ages, books can either be read out loud or silently. Additionally, an understanding of appropriate literature and how to select books for interventions is vital (Gladding & Gladding, 1991). In the classroom, the facilitator might be a regular education teacher, special education teacher, school counselor, or librarian.

Media selection. When choosing books to use in a program targeted at changing attitudes about disabilities, it is important to consider the quality of the literature, the quality of the illustrations, and the portrayal of individuals with disabilities (Dyches & Prater, 2000). Many older books and some classic fairy tales may present individuals with disabilities in very negative ways. Physical and cognitive differences may be used as metaphors for negative, even evil, internal qualities. Some popular, easily recognizable examples include Captain Hook, hunch backed witches, dwarfs, giants, and characters that are ultimately blinded (Dyches & Prater, 2005).

Quality children's literature is based on the strengths of six elements: (a) theme, (b) characterization, (c) setting, (d) plot, (e) point of view, and (f) style (Dyches & Prater, 2000). When implementing developmental bibliotherapy with young children, books with a first-person point of view may be most effective as the children can identify more easily with a first-person narrator (Doll & Doll, 1997).

Illustrations play a vital role in children's picture books, as they are an integral part of telling the story. Quality illustrations (a) interpret the story well, (b) have an artistic style appropriate to the target audience, (c) enhance the elements of the written text, (d) consist of quality artwork and consider the rhythm, balance, variety, emphasis, special order, and unity of the work, and (e) work with text to create a composite effective layout.

Within the context of quality literature and illustrations, the portrayal of individuals with disabilities must also be examined. The Images and Encounters Profile (Blaska, 1996) consists of ten criteria to apply to books featuring characters with disabilities.

1. Promotes empathy, not pity.
2. Depicts acceptance not ridicule.
3. Emphasizes success rather than, or in addition to, failure.
4. Promotes positive images of persons with disabilities or illness.
5. Assists children in gaining accurate understanding of the disability or illness.
6. Demonstrates respect for persons with disabilities or illness.
7. Promotes attitude of "one of us" not "one of them."
8. Uses language which stresses person first, disability second philosophy.
9. Describes the disability or person with disabilities or illness as realistic (i.e. not subhuman or superhuman).
10. Illustrates characters in a realistic manner.

Although in recent years there has been an increase in availability of appropriate children's literature featuring children who have disabilities, there continues to be a dearth in the overall children's book market (Blaska, 2004). There are even fewer books portraying characters from ethnically diverse backgrounds with disabilities (Dyches & Prater, 2005). In regards to books for young children featuring individuals who use AAC, the picture is bleak. Currently there is one book, *Sarah's Surprise* (Holcomb, 1990), available about a child who uses AAC. *Sarah's Surprise* is a simple book featuring a 6-year-old girl who wants to sing Happy Birthday to her mother. She gets a voice output AAC system and is able to sing at the party. This book was used in Favazza and Odom's (1997) study of promoting positive attitudes of kindergarteners toward peers with disabilities. It was one of 27 books read over the course of the 9-week study. However,

Sarah's Surprise does not focus on the typicality of Sarah, the child who uses AAC, nor does it focus on friendships with typically developing peers.

Follow up discussion and activities. Follow-up, comprehension building discussion and activities serve as a forum for furthering the bibliotherapeutic process. Discussion may include examination of characters, their motivations, and the problems they face. Characters' actions, choices, and consequences may be explored, along with similarities between the characters and the readers (Doll & Doll, 1997). Activities do not need to be limited to classroom discussions and may include creative writing, art projects, or role-play (Pardeck & Pardeck, 1993). If the story has been read out loud, the bibliotherapist can examine children's reactions as they occur and respond to these in the comprehension building stage. In a bibliotherapy program regarding AAC for younger grade school age children, books need to be read out loud to ensure understanding of text. The bibliotherapist can then address any confusion or concerns regarding AAC and/or the story in the context of comprehension building.

Adverse responses. Reading out loud also allows for monitoring children for any adverse emotional reactions that might be more than the facilitator is qualified to deal with and potentially require a referral to a mental health professional. Some signs of concern include excessive restlessness, highly regressive behavior, intense fearfulness, complaints of illness, emotional outbursts, talk of suicide, and overall discouragement (Doll & Doll, 1997).

In summary, negative attitudes toward individuals with disabilities can present barriers to the individuals' overall social and societal inclusion. Developmental bibliotherapy is one approach that has been presented to address children's attitudes

toward peers with disabilities. However, there is a need for research exploring the efficacy of developmental bibliotherapy that addresses methodological challenges. If developmental bibliotherapy is not effective, more useful interventional tactics for changing attitudes need to be identified and utilized. On the other hand, if developmental bibliotherapy is effective, then clear information related to procedures, rationale, and expected outcomes need to be further introduced into school settings.

Research Questions

The objective of the proposed study is to investigate the attitudes of first grade children toward peers who use AAC. The specific research questions are: (1) Are attitudes of first grade children toward peers who use AAC positively affected by hearing a book read out loud about a child who uses AAC, accompanied by a developmental bibliotherapy group discussion? (2) Are there gender differences in first grade children's attitudes toward peers who utilize AAC?

CHAPTER II

METHODS

The purpose of the study was to investigate the influence of a one-time bibliotherapy intervention on the attitudes of first grade children. An independent, quasiexperimental design in which a control group was compared to an experimental group was used for this study. This was an appropriate design, as quantitative, quasi-experimental design is an established format that is accepted in educational research (Drew, Hardman, & Hosp, 2008). The null hypothesis was: As a result of the bibliotherapy intervention, there will be no significant difference in reported attitudes toward individuals who use AAC. The alternative hypothesis was: As a result of the bibliotherapy intervention, there will be a significant difference in reported attitudes toward individuals who use AAC.

Participants

Seventy-one participants, ages 6 and 7, attending first grade in a small town in the Intermountain West participated in this study. If a child's parent did not give consent for participation, the results from the child's pretest and AAC Acceptance Scale for Young Children were not used and the child's forms were destroyed. Per teacher report, all participants spoke and understood English at grade level. The consent form had a space to indicate if the child knew someone who used AAC. Due to findings indicating that individuals who have contact and experience with people with disabilities (including

those who use AAC) report more positive attitudes toward individuals with disabilities (McCarthy & Light, 2005), participants who had prior contact with AAC users were not included in this investigation. No children were excluded from this study based on knowing someone who used AAC.

Additionally, the University of Utah IRB requires that children age 7 and older give assent to participate in research. Assent forms were completed on the day that the researcher implemented the study. All the children assented to participation. On the days of the research, there were seven children who had parental consents but were absent from school, so they were not included in the study.

Sampling

Cluster sampling was used, as natural clusters exist across first grade elementary classrooms. Cluster sampling consists of placing a population into clusters and then taking samples from the clusters (Drew et al., 2008). This approach is frequently used in educational settings (Wang & Fan, 1997). It is cost effective and convenient when the population is large (Young, 1985). A drawback to this approach is that although classrooms are likely to be similar in composition with regard to gender, age, ability, and socioeconomic status, it does not guarantee that they are equivalent and truly representative of the population as a whole. This can, in turn, impact the external validity (e.g., generalizability) of the study. However, as the research topic of bibliotherapy and AAC is in its early stages, it can be acceptable to focus more on internal validity concerns to obtain rudimentary information (Drew et al., 2008).

Recruitment

Recruitment began after approval was obtained from the University of Utah and School District Institutional Review Boards (IRB), and the school principals had granted permission. Approximately 2 weeks prior to implementation of the study, 140 parental permission consent forms were sent home to the parents of first grade students in six different classrooms in two elementary schools. The most common language spoken in the school district, after English, was Spanish. Depending on the primary language spoken by the parents, the consents were sent home in either English or Spanish. Due to low levels of responses, the parental consents were resent to all parents in the six classrooms 1 week prior to research.

Setting

The study was implemented in six classrooms in two elementary schools in a rural setting (population approximately 23,000) in the Intermountain West. General demographic information provided by the school district is summarized in Table 1. As noted by this table, the district had a high percentage, 83.61%, of children who are white. The national average is 58% of students are non-Hispanic white (NEA, 2008). English language learners comprised a higher percentage, 13.41%, than the national average of 10.70% (Batalova & McHugh, 2010). The district report of 18.92% economically disadvantaged students did not specify what criteria were used. However, additional resources (World Media Group, 2012) reported the district percentage of families in poverty as 3.49%, as compared to the national average of 10.08%.

Table 1. School District Demographics Grades K-12

Characteristic	Enrollment	Percentage
Race		
White	3636	83.61
Native American	384	8.83
Asian	132	3.04
Black	37	.85
Pacific Islander	20	.46
Hispanic heritage	776	17.84
English language learners	583	13.41
Economically disadvantaged	823	18.92
Gender		
Male	2240	51.51
Female	2109	48.49

Note. N = 4349 Adapted from Park City School District. (2012). *District statistics.* Retrieved from http://www.pcschools.us/index.php?page=263

All study activities took place in the children's classrooms during the regular school day. The study was implemented at approximately the same time of year and time of day across classrooms in order to control for maturation and fatigue. Teachers were present and available during study activities in order to assist with classroom management. The school counselor was informed of the research and was available in the event that any child became upset from the topic and required assistance.

Materials

Experimental group book

For this study, I wrote a children's book, *Ben and His Three-Pound Voice,* featuring a child who uses AAC (see Appendix A). The illustrator was Laura Sihvonen, graduate of the Art Center College of Design. The book's text was scanned for grade readability using Microsoft Office Word's Flesch-Kincaid grade level readability test, which evaluates text based on U. S. school grade levels. *Ben and His Three- Pound Voice* had a grade readability level of 3.5. This is appropriate for reading aloud to first grade children based on the recommendation that books read out loud be several levels above grade readability level (Donoghue, 2009).

Prior to implementation of the study, three master's level practitioners (one in library science, one in education, and one in speech/language pathology) reviewed the book. The master's level practitioners utilized The Images and Encounters Profile (Blaska, 1996) to assess the book's portrayal of individuals with disabilities (see Appendix B). They also completed the Bibliotherapy Evaluation Tool (BET; Bibliotherapy Education Project, 2007). The BET (see Appendix C) is a tool available through the University of Nevada, Las Vegas, Libraries and College of Education. The BET provides a framework to assess books to use in bibliotherapy. The evaluation addresses (a) general format and structure, (b) subject matter, (c) reading level, (d) book length, (e) text and pictures, (f) developmental level, (g) diversity factors, (h) context/environment or situation/use, (i) therapeutic uses, and (j) additional considerations. All reviewers indicated that the areas that were reviewed were appropriate for use in bibliotherapy and that the book's portrayal of individuals with disabilities was

appropriate. Based on the reviewers' feedback, no changes were made to the experimental group book.

Control group book

The control group book was *The Library Pages* (Morton, 2010). The book does not feature any children with disabilities or individuals who use AAC. This book features a group of children who play a trick on their school librarian who is on maternity leave, by sending the librarian a DVD of themselves doing things that should not be done to books or in a library (e.g., shelving books by color, cutting out pictures, etc.). At the end of the book the children tell the librarian that it was an April Fools' joke. As shown in Table 2, the control book was similar to the experimental book in reading level, length, and style.

Table 2. Comparison of Experimental and Control Books

Book Specifications	*Ben and His Three-Pound Voice*	*The Library Pages*
Flesh-Kincaid Level	3.5	3.3
Illustration Style	Full page, full color, multimedia, outlined images, colored predominately in gradational manner, bright colors	Full page, full color, multimedia, outlined images, colored predominately in gradational manner, bright colors
Pages	29	32
Word Count	1830	1015
Themes	AAC, friendship, determination,	Appropriate use of library books, trick played on librarian

Instruments

Pretest

To assist in gaining information regarding the similarity of the control and experimental groups with regard to initial attitudes toward individuals who use AAC, all participants completed a pretest (see Appendix D) immediately after hearing an introduction that reviewed AAC (see Appendix E). The pretest consisted of three questions, with one question each addressing the cognitive, behavioral, and affective components of attitude toward individuals who use AAC.

AAC acceptance scale for young children

I created the AAC Acceptance Scale for Young Children (see Appendix F) to examine the behavioral, cognitive, and affective domains of young children's attitudes toward individuals who use AAC. The scale was adapted from the Acceptance Scale for Kindergarteners-Revised (ASK-R; Favazza & Odom, 1999) and from the Assessment of Attitudes Toward Augmentative and Alternative Communication (AATAAC; Beck, Fritz et al., 2000). The ASK-R was developed to assess the attitudes of kindergarten children toward children with disabilities. It focuses on the affective and behavioral aspects of attitude. The AATAAC focuses on the cognitive, affective, and behavioral aspects of attitudes toward individuals who use AAC. Table 3 provides (a) the questions/statements on the AAC Acceptance Scale for Young Children, (b) the original wording from the scale that the questions/statements were adapted from, and (c) the aspect of attitude addressed by each question/statement.

Children completed the AAC Acceptance Scale for Young Children by selecting "yes," "no," or "maybe." A corresponding smiling face, frowning face, and a question

Table 3. Adaptations from ASK-R and AATAAC Scales

AAC Acceptance Scale for Young Children	Original Wording AATAAC	Original Wording ASK-R	Area Addressed
AAC is a different way of talking.			Cognitive
Would you move to another chair if a kid who uses AAC sat next to you?		Would you move to another chair if a handicapped kid sat next to you?	Behavioral
Kids and grown-ups can use AAC.			Cognitive
Would you invite a kid who uses AAC to a birthday party?	I would invite a child who uses AAC to a party I had.		Behavioral
Would you play with a kid even if he or she looked different?		Do you play with kids even if they look different?	Behavioral
Do kids who use AAC scare you?	Children who use AAC scare me.		Affective
Is pointing at pictures a kind of AAC that some kids use?			Cognitive
Would you still talk to a kid even if he or she used AAC?		Would you still talk to a kid even if he was handicapped?	Behavioral
Are kids who use AAC fun to be with?	I think children who use AAC are fun to be with.		Affective
Would you like to spend your recess with a kid who uses AAC?		Would you like to spend your recess with a handicapped kid?	Affective
Do you like kids who use AAC?	I like children who use AAC.		Affective
A kid might use AAC because he or she can't talk.			Cognitive
Would you invite a kid who can't talk to play at your house?	I would invite a child who uses AAC to my house		Behavioral
Would you feel happy around a kid who uses AAC?	I would feel comfortable around a child who uses AAC.		Cognitive
Could a kid use AAC to talk at school?			Cognitive

mark face supplemented the written text for clarity. The children placed an "X" through their desired response after each question/statement was read out loud to them.

Acquiescence bias is the tendency for participants to choose positive responses on the majority of items (Barnette, 2010). To control for acquiescence bias, the scale was designed to include negative wording so that if a participant were to select only smiling faces in order to please, it would not report a solely positive attitude response.

I developed an AAC Acceptance Scale for Young Children that was pilot tested with 24 children in a first grade classroom of 6 and 7 year old children who were not identified as potential participants in the study. Pilot data indicated that the children were able to understand the questions and follow instructions to complete the questionnaire. However, the feedback received from both the classroom teacher and the students was that the scale took too long to complete. The children's behavior reflected this feedback, as they had difficulty paying attention after approximately 15 questions had been asked. Based on this, I, the researcher, decided to reduce the number of items on the scale from 22 to 15. Cronbach's Alphas were conducted on the remaining 15 affective, behavioral, and cognitive items to examine internal consistency. In social sciences, a 7.0 is often considered the conventional standard for an acceptable Cronbach's Alpha. In the affective domain, the Cronbach's Alpha for the 5 remaining items was .799. The Cronbach's Alpha for the 5 remaining items in the behavioral domain was .714. The Cronbach's Alpha for the 4 remaining cognitive domain items was .338. (Note: Only 4 items in the cognitive domain were tested, as the 5th question in the cognitive domain was changed and chosen after the pilot test). Schmitt (1996, p. 353) argued that, "in some cases, measures with (by conventional standards) low levels of alpha may still be quite

useful." He expanded upon this by stating that, if a measure of a certain domain covers meaningful content, then the lower alpha may not preclude its use. After careful examination of the questions/statements in the cognitive domain, I speculated that the obtained alpha in that domain reflected this situation and made the decision to proceed with the existing questions.

Procedures

I served as the facilitator for all groups. In both groups, the children (a) heard the introduction script, (b) completed the pretest, (c) were read either the experimental or the control group book, (d) participated in a bibliotherapy discussion and activity, and (e) completed the AAC Acceptance Scale for Young Children.

Control group

The control group heard the introduction script (see Appendix E), which provided a brief introduction to AAC. They heard instructions and completed the pretest questions (see Appendix D). Next, I read *The Library Pages* (Morton, 2010) to the children. After reading the book, I read bibliotherapy discussion questions to guide discussion about the book (see Appendix G). The discussion culminated with the children drawing pictures about how to treat books or act in the library. Depending on the classroom group, the discussion lasted between 10-15 minutes, with the last 5 minutes allotted for the drawing activity. Then the group listened to the AAC Acceptance Scale for Young Children instruction script (see Appendix H) and completed the scale.

Experimental group

The experimental group heard the same AAC introduction script (see Appendix E) and heard the same instructions and completed the same pretest questions (see Appendix D) as the control group. Then, I read the book, *Ben and His Three-Pound Voice* (see Appendix A). After reading the book, the facilitator read bibliotherapy discussion questions (see Appendix I). These scripted questions were age appropriate and posed to the class to facilitate discussion and promote positive themes of both the typicality of the character that used AAC and the social acceptance of children who use AAC. An activity where the children drew a picture of what they would do with a friend who used AAC concluded the discussion. This activity was chosen as it stressed the behavioral intention of interacting with a child who uses AAC. Depending on the classroom, the discussion lasted between 10-15 minutes, with the last 5 minutes allotted for the drawing activity. Then the group listened to the AAC Acceptance Scale for Young Children instruction script (see Appendix H) and completed the AAC Acceptance Scale for Young Children (see Appendix F).

Data Entry Reliability And Procedural Fidelity

Data from both the pretest and the AAC Acceptance Scale for Young Children response sheets were entered into an Excel spreadsheet and transferred into the Statistical Package for the Social Sciences (SPSS) statistical analysis computer program. Data entry reliability for both the pretest and the AAC Acceptance Scale for Young Children were assessed by having the data from 20% of the response data sheets entered by a second observer. The formula for calculating the data entry reliability was the number of agreements divided by the number of agreements plus disagreements multiplied by 100.

No discrepancies in data entry were found resulting in a data entry reliability of 100% agreement.

An independent observer, an undergraduate student in the University of Utah's College of Education, was present during all sessions to assess procedural fidelity. The observer indicated the extent to which the scripts and procedural steps were followed on the procedural fidelity data collection form (see Appendix J). The formula used to calculate procedural fidelity was the number of scripted sentences and procedural steps said/performed accurately divided by the total number of scripted sentences and procedural steps multiplied by 100. The results were: 339/340 x 100 = 99.71.

Data Analysis

The study used a group quasiexperimental design with an independent difference question. Both the pretest questions and the AAC Acceptance Scale for Young Children were 3-point Likert-type scales; therefore, the data collected was ordinal and nonparametric. In addition to the composite data collected on the control and experimental groups, each of the attitudinal components, and both the control and experimental groups were subdivided by gender, and data was compared between males and females. For descriptive purposes, medians for central tendency and semi-interquartile ranges for dispersion were calculated for each group.

The inferential statistics used to calculate significance for each group and all data comparisons were Mann-Whitney U tests. The Mann-Whitney U test is a nonparametric test that is appropriate to use with ordinal, rank order data (Drew et al., 2008). It requires that the data are independent and continuous (Gibbons & Chakraborti, 2011). The planned analysis included a two-tailed rejection region with a .05 level of significance.

Sample size was determined based on Noether's (1987) formula for determining sample sizes for Mann-Whitney U statistics. With a .05 level of significance and power of .80, a minimum sample size of 23 was needed. The sample size of 71 used in this study exceeded this minimum. There were 41 children in the experimental group, and 30 in the control group. The Mann-Whitney U test was an appropriate choice for data analysis as it does not require equal sample sizes (Gibbons & Chakraborti, 2011).

CHAPTER III

RESULTS

Pretest

A Mann-Whitney U (two-tailed, .05 level of significance) was completed on the three-question pretest in order to determine if the experimental and control groups were significantly different in regards to attitude toward individuals who use AAC. Each question was coded and had a range of possible scores from 1-3, with 1 being a positive response toward peers who use AAC, 2 undecided, and 3 negative. Thus, a higher score represented a more negative attitude. Table 4 summarizes the pretest findings. The results of the composite pretest given to both the control and experimental group indicated no significant difference between the two groups ($p = .127$). The experimental group mean rank was 32.86, and the control group mean rank was 40.05. The median of the experimental group was 5.00, with an interquartile range of 1.00. The median of the control group was 5.00, with an interquartile range of 2.00. Based on this analysis, the conclusion was made that prior to the intervention the groups were similar in attitude composition toward individuals who use AAC.

A Mann-Whitney U (two tailed, .05 level of significance) was also conducted in order to compare gender differences within the experimental and control pretest groups. As noted in Table 4, there were no significant differences found between genders in neither the experimental ($p = .257$) nor the control ($p = .806$) groups. In the experimental

group, the male mean rank was 22.08, with a median of 5.00 and an interquartile range of 1.00. The female mean rank was 18.13, with a median of 4.50 and an interquartile range of 1.75. In the control group, the mean rank of the males was 15.63, with a median of 5.00 and an interquartile range of 1.75. The mean rank of the females was 16.40, with a median of 5.00 and an interquartile range of 2.00.

Finally, a Mann-Whitney U (two tailed, .05 level of significance) was performed to compare the pretest data for the experimental and control pretest groups on the basis of gender. No significant differences were found between the males in the experimental and the control groups (p = .620). The mean rank for males in the experimental group was 19.79, and the mean rank for males in the control group was 21.56. Significant differences in pretest data were also not found between females in the experimental and control group (p = .070). The mean rank for females in the experimental group was 13.25, and the mean rank for females in the control group was 18.93.

AAC Acceptance Scale For Young Children

In order to determine if there were significant differences in attitude between the experimental and control groups after the intervention, Mann-Whitney U tests (two tailed, .05 level of significance) were conducted on each of the attitudinal components, and on the composite total of the cognitive, affective, and behavioral scores combined. Each question was coded and had a range of possible scores from 1-3, with 1 being a positive response toward peers who use AAC, 2 neutral, and 3 negative. A higher score represented a more negative attitude. Table 5 summaries the findings, followed by a review of the results of each attitude component.

Table 4. Pretest Differences in Attitudes Toward Peers Who Use AAC

Comparison	Mean Rank	Percentiles 25th	50th	75th	*U*	Asymp. Sig. (2-tailed)
Pretest Composite						
Experimental	32.86	4.00	5.00	5.00	494.50	.127
Control	40.05	4.00	5.00	6.00		
Experimental						
Male	22.08	4.00	5.00	5.00	154.00	.257
Female	18.13	3.25	4.50	5.00		
Control						
Male	15.63	4.00	5.00	5.75	114.00	.806
Female	16.40	4.00	5.00	6.00		
Male						
Experimental	19.79	4.00	5.00	5.00	175.00	.620
Control	21.56	4.00	5.00	5.75		
Female						
Experimental	13.25	3.25	4.50	5.00	76.00	.070
Control	18.93	4.00	5.00	6.00		

Note. N = 71. Males = 40 Females = 31
*$p < .05$

Table 5. Comparison of Differences in Attitudes Toward Peers Who Use AAC

Comparison	Mean Rank	Percentiles 25th	50th	75th	*U*	Asymp. Sig. (2-tailed)
Composite						
Experimental	40.04	17.50	21.00	24.50	449.50	.053
Control	30.48	16.00	18.50	21.25		
Cognitive						
Experimental	32.94	5.00	5.00	5.50	489.50	.074
Control	40.18	5.00	5.00	7.25		
Affective						
Experimental	40.84	6.00	8.00	9.50	416.50	.019*
Control	29.38	5.00	6.50	8.00		
Behavioral						
Experimental	41.33	6.00	8.00	9.50	396.50	.010*
Control	28.72	5.00	6.00	8.00		

Note. N = 71.
*$p < .05$

Composite

Although approaching significance, the combined scores of the cognitive, affective, and behavioral components of attitude were not found to be significantly different between the experimental and control groups at a .05 level (p = .053). The experimental group demonstrated a mean rank of 40.04, compared to the mean rank of the control group of 30.48. The median of the experimental group was 21.00, while the median of the control group was 18.50. The interquartile range for the experimental group was 7.00, and the interquartile range for the control group was 5.25.

In the composite comparison, the total scores could range from 15 to 45, with 15 representing the most positive attitude toward individuals who use AAC, and 45 representing the most negative attitude toward individuals who use AAC. Figure 1 details the frequencies of the composite response scores in the experimental and control groups. As illustrated by Figure 1, the score frequencies were similar, although the experimental group had slightly greater incidences of higher (negative attitude) scores.

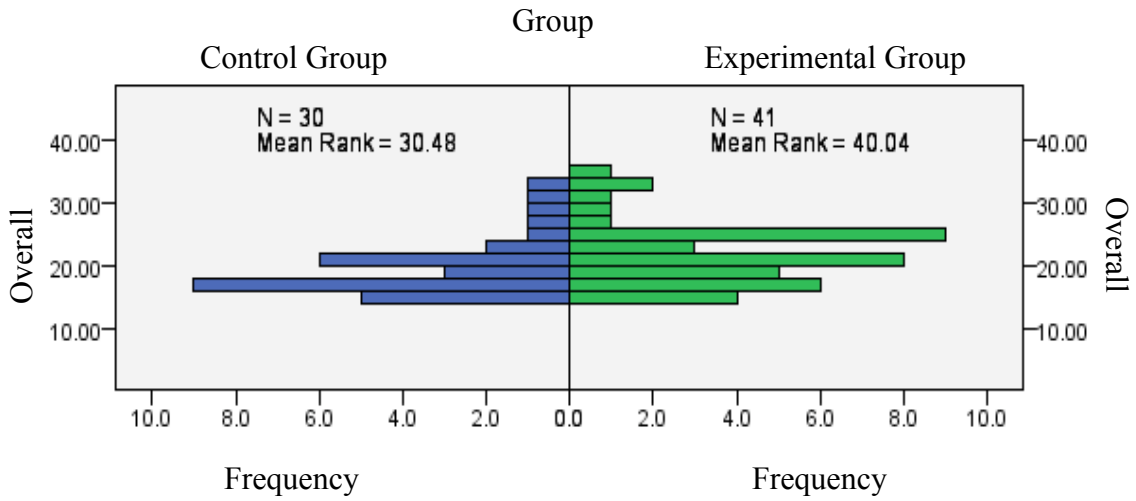

Figure 1. Composite Response Frequencies

Cognitive domain

A significant difference in attitude toward peers who use AAC was not demonstrated in the cognitive domain (p = .074). The mean rank of the experimental group was 32.94, while the mean rank of the control group was 40.18. The median of the experimental group was 5.00, and the median of the control group was also 5.00. The interquartile range for the experimental group was .50, while the interquartile range for the control group was 2.25. The individual domains consisted of five questions per domain. Therefore, scores could range from 5, most positive, to 15, most negative. Figure 2 details the response score frequencies of the control and experimental groups in the cognitive domain. As illustrated by Figure 2, there were similarities in score frequencies concentrated at the lower scores (positive attitude), although the control group showed greater frequency of higher scores (negative attitude).

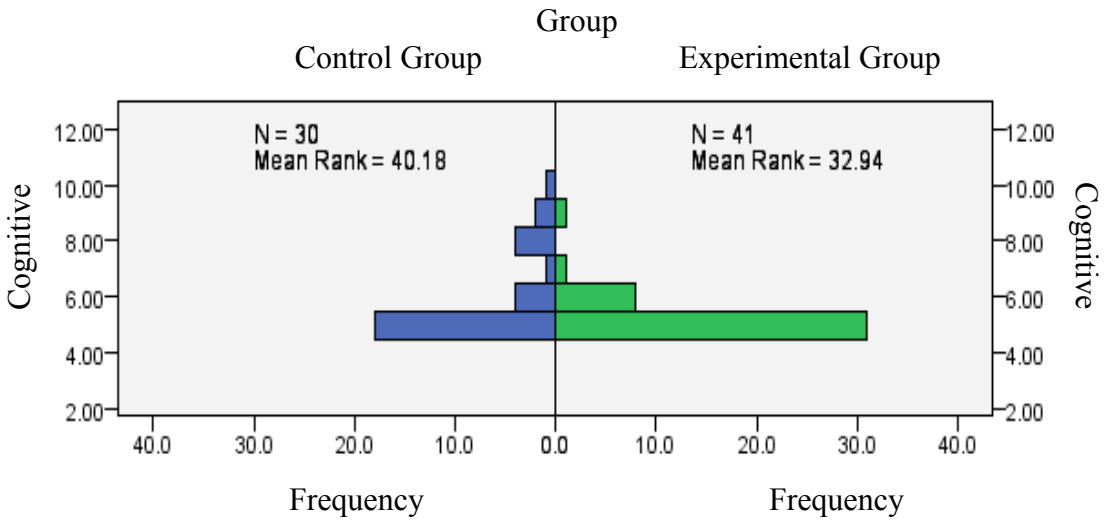

Figure 2. Cognitive Domain Response Frequencies

Affective domain

In the affective domain, a significant difference was found between the control and experimental groups (p = .019). The experimental group had a mean rank of 40.84, while the control group had a mean rank of 29.38. Therefore, the experimental group demonstrated a significantly more negative affective expression of attitude toward peers who use AAC. The median of the experimental group was 8.00, while the median for the control group was 6.50. The interquartile range for the experimental group was 3.50, and the interquartile range was 3.00 for the control group. Figure 3 documents the score frequencies of the experimental and control groups in the affective component of attitude. As illustrated by Figure 3, the experimental group showed a greater concentration of scores at the higher numbers (negative attitude) than the control group.

Behavioral domain

In the behavioral domain, a significant difference was found between the control and experimental groups (p = .010). The experimental group had a mean rank of 41.33, and the mean rank of the control group was 28.72. This indicates that the experimental group had a significantly more negative intended behavior than the control group. Additionally, the experimental group had a median of 8.00, while the control group had a median of 6.00. The interquartile range of the experimental group was 3.50, and the interquartile range for the control group was 3.00. Figure 4 shows the score frequencies in the behavioral domain for the control and experimental groups. As noted by Figure 4, the control group had a greater frequency of scores in the most positive attitude range, in comparison to the experimental group where there were scores of the highest (most negative) number possible.

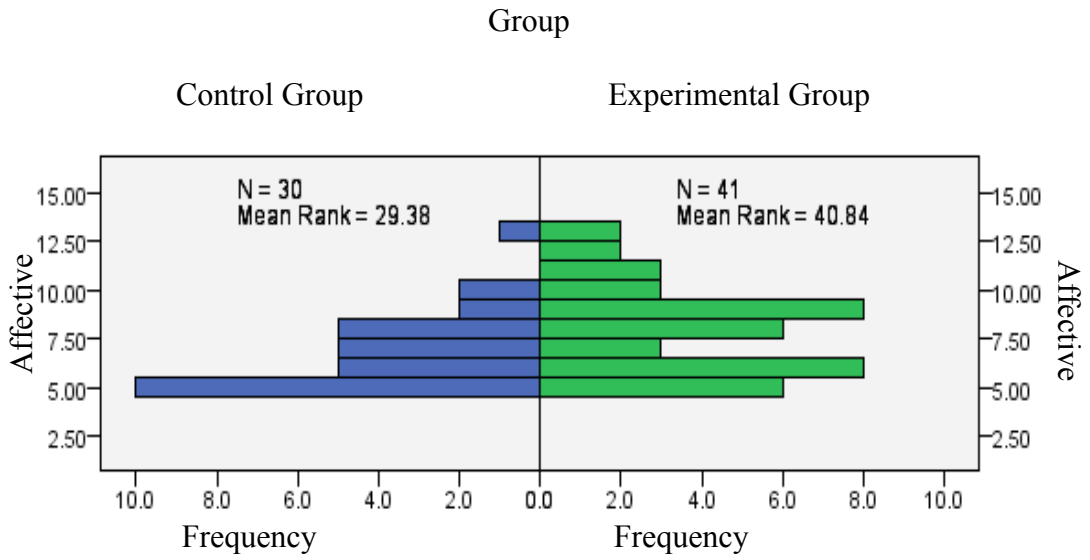

Figure 3. Affective Domain Response Frequencies

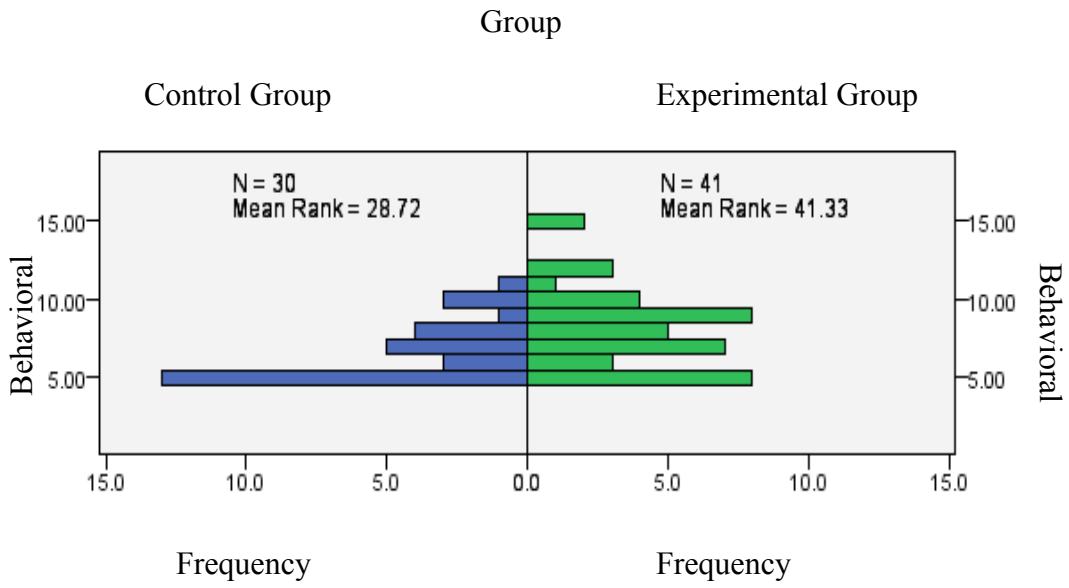

Figure 4. Behavioral Domain Response Frequencies

Across Gender Comparisons

Mann-Whitney U tests (two tailed, .05 level of significance) were conducted to compare gender within the experimental and control groups for each of the attitudinal components, and for the composite attitudinal measure. There were 25 boys and 16 girls in the experimental group. The control group consisted of 15 boys and 15 girls. Table 6 summarizes the findings.

Composite

In the experimental group the combined measure of cognitive, affective, and behavioral components of attitude did not demonstrate a significant difference between genders (p = .494). The males demonstrated a mean rank of 22.02, and the females mean rank was 19.41. The median of the males was 21.00, with an interquartile range of 8.50, while the female median was 20.50, with an interquartile range of 5.50. Likewise, the control group also did not show a significant difference between genders (p = .478). The mean rank of the males was 14.37, and the mean rank for the females was 16.63. The median of the males was 17.00, with an interquartile range of 6.00, and the females' median was 20.00, with an interquartile range of 5.00.

Cognitive

In the experimental group there was no significant difference between genders in the cognitive domain of attitude (p = .544). The mean rank for the males was 21.68 and the mean rank for the females was 19.94. The median for the males was 5.00, and the interquartile range was 1.00. The median for the females was 5.00, and the interquartile range was 0. The control group demonstrated similar findings, as a significant difference

Table 6. Comparisons Between Genders in AAC Acceptance Scale for Young Children

Comparison	Mean Rank	Percentiles 25th	50th	75th	*U*	Asymp. Sig. (2-tailed)
Composite Experimental						
Male	22.02	16.50	21.00	25.00	174.50	.494
Female	19.42	18.25	20.50	23.75		
Composite Control						
Male	14.37	16.00	17.00	22.00	95.50	.478
Female	16.63	16.00	20.00	21.00		
Cognitive Experimental						
Male	21.68	5.00	5.00	6.00	183.00	.544
Female	19.94	5.00	5.00	5.00		
Cognitive Control						
Male	15.00	5.00	5.00	8.00	105.00	.725
Female	16.00	5.00	5.00	7.00		
Affective Experimental						
Male	22.40	6.00	9.00	11.00	164.00	.331
Female	18.75	6.00	8.00	9.00		
Affective Control						
Male	14.90	5.00	6.00	8.00	103.50	.702
Female	16.10	5.00	7.00	8.00		
Behavioral Experimental						
Male	21.46	5.00	8.00	10.00	188.50	.756
Female	20.28	6.25	8.00	9.00		
Behavioral Control						
Male	14.67	5.00	6.00	8.00	100.00	.587
Female	16.33	5.00	7.00	8.00		

Note. N = 71. Male = 40 Female = 31
*$p < .05$

was not found between genders (p = .725). In the cognitive domain control group the mean rank for males was 15.00, and 16.00 for females. The median for males was 5.00 with an interquartile range of 3.00, while the median for females was 5.00 with an interquartile range of 2.00.

Affective

In the affective domain, no significant differences were found between males and females in the experimental group (p = .331). The males had a mean rank of 22.40, and the females had a mean rank of 18.75. The median for males was 9.00 with an interquartile range of 5.00. For the females, the median was 8.00, and the interquartile range was 3.00. Similarly, for the control group, no significant difference was found between males and females (p = .702), with a mean rank of 14.90 for males and 16.10 for females. The median for males was 6.00 and the interquartile range was 3.00. The median for females was 7.00, and the interquartile range was 3.00.

Behavioral

The experimental group did not show a significant difference between genders in the behavioral domain (p = .756). The mean rank for males was 21.46 and the mean rank for females was 20.28. The median for males was 8.00, with an interquartile range of 5.00. The median for females was 8.00, with a range of 2.75. The control group in the behavioral domain also did not demonstrate a significant difference between genders (p = .587). The mean rank for males was 14.67, while the mean rank for females was 16.33. The median for males was 6.00, and the interquartile range was 3.00. The median for females was 7.00, with an interquartile range of 3.00.

Within Gender Comparisons

In order to determine differences within genders between experimental and control groups, a Mann-Whitney U was conducted for each gender on both the composite scores and the attitudinal domains. Table 7 summarizes the findings.

Composite

A significant difference was not found ($p = .092$) in the composite measure between males in the experimental and control groups. The males in the experimental group demonstrated a mean rank of 22.90, and the males in the control group had a mean rank of 16.50. The median for the male experimental group was 21.00, with an interquartile range of 8.50. The median for the male control group was 17.00, with an interquartile range of 6.00.

There was also not a significant difference between female experimental and control groups in the composite measure of attitude ($p = .350$). The experimental group had a mean rank of 17.47, and the control group had a mean rank of 14.43. The median for the female experimental group was 20.50, with an interquartile range of 5.50. The median for the female control group was 20.00, with an interquartile range of 5.00.

Cognitive

When comparisons were made within gender in the cognitive domain, no significant difference was found between the male experimental and control groups ($p = .467$). In the experimental group the mean rank was 19.66, and in the control group the mean rank was 21.90. The median in the male experimental group was 5.00, and the

Table 7. Comparisons Within Gender in AAC Acceptance Scale for Young Children

Comparison	Mean Rank	Percentiles 25th	50th	75th	*U*	Asymp. Sig (2-tailed)
Composite						
Male Experimental	22.90	16.50	21.00	25.50	127.50	.092
Male Control	16.50	16.00	17.00	22.00		
Composite						
Female Experimental	17.47	18.25	20.50	23.75	96.50	.350
Female Control	14.43	16.00	20.00	21.00		
Cognitive						
Male Experimental	19.66	5.00	5.00	6.00	166.50	.467
Male Control	21.90	5.00	5.00	8.00		
Cognitive						
Female Experimental	13.66	5.00	5.00	5.00	82.50	.073
Female Control	18.50	5.00	5.00	7.00		
Affective						
Male Experimental	23.50	6.00	9.00	11.00	112.50	.034*
Male Control	15.50	5.00	6.00	8.00		
Affective						
Female Experimental	17.84	6.00	8.00	9.00	90.50	.234
Female Control	14.03	5.00	7.00	8.00		
Behavioral						
Male Experimental	23.34	5.00	8.00	10.00	116.50	.042*
Male Control	15.77	5.00	6.00	8.00		
Behavioral						
Female Experimental	18.22	6.25	8.00	9.00	84.50	.153
Female Control	13.63	5.00	7.00	8.00		

Note. N = 71. Male = 40, Female = 31

*p <.05

interquartile range was 1.00. The median in the male control group was 5.00, with an interquartile range of 3.00.

A significant difference was also not found between the female experimental and control groups (p = .073). The mean rank in the female experimental group was 13.66, and 18.50 in the control group. The median in the female experimental group was 5.00 with an interquartile range of 0. The median in the female control group was 5.00 with an interquartile range of 2.00.

Affective

A significant difference was demonstrated between the male experimental and control groups in the affective domain (p = .034), with the experimental group showing a more negative attitude toward peers who use AAC. The mean rank of the experimental group was 23.50, and the mean rank of the control group was 15.50. The median for the experimental group was 9.00, with an interquartile range of 5.00. The median for the control group was 6.00, with an interquartile range of 3.00.

A significant difference was not found between the female experimental and control groups (p = .234), with an experimental mean rank of 17.84, and a control mean rank of 14.03. The median for the experimental group was 8.0 with an interquartile range of 3.00. The median for the control group was 7.00, with an interquartile range of 3.00.

Behavioral

In the behavioral domain a significant difference was demonstrated between the males in the experimental and control groups (p = .042). The mean rank for the experimental group was 23.34, and the mean rank for the control group was 15.77. The

median for the experimental group was 8.00 with an interquartile range of 5.00. The median for the control group was 6.00 with an interquartile range of 3.00.

A significant difference was not demonstrated between the female experimental and control groups (p = .153). The mean rank of the experimental group was 18.22, and the mean rank of the control group was 13.63. The median for the experimental group was 8.00, with an interquartile range of 2.75. The median for the control group was 7.00, with an interquartile range of 3.00.

CHAPTER IV

DISCUSSION

In the composite attitude measure and the cognitive component the null hypothesis was retained: As a result of the bibliotherapy intervention, there will be no significant difference in reported attitudes toward individuals who use AAC. In the affective and behavioral components of attitude, the results of the study supported the alternative hypothesis: As a result of the bibliotherapy intervention, there will be a significant difference in reported attitudes toward individuals who use AAC. However, the changes in attitude were not in the positive direction supported by some of the literature regarding bibliotherapy and individuals with disabilities (Cameron & Rutland, 2006; Favazza et al., 2000), but instead the affective and behavioral components of attitude demonstrated significant differences in the experimental group toward a more negative attitude toward children who use AAC.

The results of this study support the need to examine the three components of attitude separately, as suggested by latent process theory. In latent process theory, an observable stimulus event occurs (the reading of a book about AAC and a bibliotherapy discussion), followed by latent cognitive, affective, and behavioral processes and a latent inferred attitude (Oskamp & Shultz, 2005). According to latent process theory, the cognitive, affective, and behavioral responses may each have their own observable responses. Furthermore, it is possible for the affective, behavioral, and cognitive

components to show different strengths of expressions of attitude. This was the case in the current study.

A posthoc analysis of correlations between the composite score and the affective, behavioral, and cognitive components was conducted in order to examine the relationships between the three components and between the components and the composite score. The correlation matrix in Table 8 details the relationships. As noted by Table 8, the measures of affective and behavioral components were significantly positively correlated at the .01 level, Pearson's $r(71) = .841$. This suggests that, in the current study, the affective and behavioral attitudinal responses were strongly related. In comparison, the correlation between the cognitive and affective domains was Pearson's $r(71) = .281$, and the correlation between the cognitive and behavioral domain was Pearson's $r(71) = .272$. This suggests that the cognitive domain was not strongly related to the affective and behavioral domains. Table 8 also illustrates that, even though all three components contributed equally to the composite score, the composite score was largely influenced by the affective and behavioral domains, and only moderately influenced by the cognitive domain. This is demonstrated by the following correlations with the composite score: for the affective component, Pearson's $r(71) = .932$, and for the behavioral component Pearson's $r(71) = .935$, while the cognitive component is smaller, with Pearson's $r(71) = .501$.

Given these correlations, the composite attitude score in the AAC Assessment Scale for Young Children can be noted, but the cognitive component should be viewed as independent of the affective and behavioral components and the three components should not be interpreted as relating to any over-arching construct. The following sections

Table 8. Correlations of Attitude Components

	Composite	Affective	Behavioral	Cognitive
Composite	_	_	_	_
Affective	.932**	_	_	_
Behavioral	.935**	.841**	_	_
Cognitive	.501*	.281*	.272*	_

Note. N = 71 **Correlation is significant at the .01 level (2-tailed) *Correlation is significant at the .05 level (2-tailed)

examine and discuss each of the individual components. Due to the similarities between the affective and behavioral components, some of their traits, possible reasons for outcomes, and contributions to findings, are reviewed together.

Cognitive

The cognitive component measured factual knowledge about AAC, such as "Kids and grown-ups can use AAC." There were no significant differences between the control and experimental groups in the cognitive domain. Although results were not significant ($p = .074$) the students in the experimental group did demonstrate a greater level of correct knowledge (mean rank 32.94) regarding individuals who use AAC when compared to the control group (mean rank 40.18). Doll and Doll (1997) identified an increase in knowledge as a goal of bibliotherapy, and the current findings suggest that, although not significant, the bibliotherapy intervention was useful in increasing participants' knowledge regarding AAC and individuals who use AAC. Although an increase in knowledge about AAC is probably necessary, the cognitive component is only one part of the complex formation of attitudes, and thus alone may not be sufficient in changing attitudes.

Affective and Behavioral

The affective component of attitude measured feelings in the respondents evoked by people who use AAC. A significant difference ($p = .019$) was found in the affective component between the experimental and control group. Specifically, the experimental group demonstrated a more negative affective status in regards to individuals who use

AAC. They reported more dislike and fear of people who use AAC, and less feelings of happiness.

The behavioral component measured how a child would behave toward an individual who uses AAC. As the respondents did not have an opportunity to actually be presented with a situation involving a child who uses AAC, this construct measured intended behavior, such as whether or not the child would play or talk with a peer who uses AAC, or invite him or her to a birthday party. There was a significant difference in the behavioral component between the experimental and control group ($p = .010$), with the experimental group demonstrating a more negative behavioral attitude toward individuals who use AAC. Although self-reported behavior does not always correspond with observed behavior (Antonak & Livneh, 2000; Oskamp & Schultz, 2005), it does reflect how the children believe they would behave if presented with a peer who uses AAC. The data indicated that the experimental group children would be less likely to socially engage, play, or even sit near a child who uses AAC.

There are several possible reasons why the experimental group showed a significantly more negative attitude following intervention in both the affective and behavioral components. One reason for this may relate to Katz's (1960) theory of attitude functions, specifically the knowledge function. The knowledge function provides a personal frame of reference to help a person understand and give meaning to his or her environment. It is possible that a one-time intervention of introducing AAC, reading a short story, and then participating in a 10–15 minute bibliotherapy discussion did not provide a thorough enough presentation to help form a positive frame of reference for the experimental group participants, resulting in confusion about the complexities of

individuals who use AAC. The thoughts, questions, and emotions evoked by being presented with the concept of having a student that uses AAC in a regular classroom may have been unsettling to the students. For example, hearing about how Ben communicated, and his relationships with friends, family, and classmates might have created anxiety in the participants about how they would interact with a peer who used AAC, or raised questions that were not responded to in the book or discussion. In order to not have to process the social and emotional complexities associated with AAC, they may have taken a simplified viewpoint and formed a more negative attitude.

A second possible explanation for why the experimental group reported a more negative behavioral and affective attitude toward individuals who use AAC may have been based on their level of evaluative knowledge. Evaluative knowledge refers to the association that an individual holds regarding an attitude object (Fazio, 2007). In this case, the attitude object is people who use AAC. As detailed in the previous example, the experimental group may have been provided with just enough of an introduction to AAC to result in ambivalent feelings with the topic. When asked to make an evaluative judgment about AAC, they may have chosen to either remain ambivalent (thus primarily selecting the maybe choices in the instrument) or they may have chosen to resolve their ambivalence by assigning AAC a negative association. Conversely, participants in the control group did not receive the same level of information about AAC, and therefore, were not presented with the same level of opportunity for ambivalent feelings to arise. As a result, the participants in the control group may have formed a positive, although most likely weak, evaluative knowledge, or association, with AAC.

Finally, the experimental group's more negative behavioral and affective attitude

toward individuals who use AAC might be related to a failure to meet the required conditions for successful extended contact effects: positive ingroup exemplars, positive outgroup exemplars, and inclusion of other in self (Wright et al., 1997). The inclusion of other in self refers to the high level of association that ingroup members have with their group identity, and therefore, view other group members as part of their self. Thus, when an ingroup member establishes a friendship with an outgroup member, that outgroup member becomes included in the self. The typicality of both the ingroup and outgroup members needs to be recognized (Liebkind & McAlister, 1999). In the current study, if participants did not identify with Nate (the ingroup exemplar and best friend of Ben, the character who used AAC and outgroup exemplar), and did not view Nate as part of their own ingroup, then the bibliotherapy intervention would not be successful, as the participants would not successfully have inclusion of other in self. This in turn would have the potential to result in an increased negative attitude.

Limitations of Current Study

Scale

The AAC Assessment Scale for Young Children was a researcher-developed instrument and was pilot tested on a small population. The short length of the scale may have impacted both the reliability (Barnette, 2010) and the validity (Antonak & Livneh, 1988) of the scale. Additionally, given that this scale is based on the child's self report, it is possible that social desirability bias (participants attempting to respond in ways to please the researchers or in what they believe to be a socially acceptable manner) influenced the findings (Barnette, 2010). An adjunct measurement of actual behavior toward an individual who uses AAC would strengthen this study, as self-report of

intended behaviors and actual behaviors are not always consistent (Antonak & Livneh, 2000; Oskamp & Schultz, 2005). For example, a child may state that he or she would invite a child who uses AAC to a birthday party, but in reality he or she would not do so. Thus, an adjunct, observable behavioral measure would help determine the predictive validity of the scale.

The AAC Acceptance Scale for Young Children is a 3-point Likert-type scale. Some debate exists over what the optimum number of responses ought to be to accurately measure a concept. The more traditional Likert scale is 5 points, consisting of Strongly Agree, Agree, Neither Agree nor Disagree, Disagree, and Strongly Disagree. The AAC Acceptance Scale for Young Children utilizes a 3-point scale with the response options of Yes, No, and Maybe. A concern with using an odd number of response points, such as in the current study, is that it can lead to central tendency bias, or the tendency for an individual to avoid selecting the most extreme responses and instead select the middle response category (Brill, 2008). However, Jacoby and Matell (1971) found that in Likert-type items, reliability and validity were not dependent on the number of scale points. Although Likert scales are extensively used in assessment of attitudes (Oskamp & Schultz, 2005), there are continuing issues regarding their most effective design (Barnette, 2010). As a Likert-type scale, the design of the AAC Acceptance Scale for Young Children could benefit from further exploration and testing.

Sampling

The study utilized cluster sampling, which although convenient, is not as strong as random sampling for placement into control and experimental groups. As previously

discussed, cluster sampling limits the generalizability of the research (Drew et al., 2008). Repeating the research using random sampling techniques would strengthen the findings.

Experimental book

Although the experimental book, *Ben and His Three-Pound Voice,* was reviewed by Master's level professionals in education, library science, and speech and language pathology, and determined to both represent disability appropriately and be suitable for use in bibliotherapy, it was not tested with any other groups outside the current study. The lack of empirical evidence regarding the efficacy of the book may have impacted the outcome of the study.

Implications For Practice

The current study contributes important information to the body of research on bibliotherapy and attitudes toward individuals who use AAC, and it highlights the importance of the research to practice link. Specifically, this study supports previous findings indicating that brief bibliotherapy alone is not an effective intervention to positively change attitudes toward individuals with disabilities (Agness, 1980; Beardsley, 1981; Penney, 1990; Smith-D'Arezzo & Moore-Thomas, 2010). This finding is important given that some literature promotes the use of bibliotherapy as a strategy for addressing social-emotional and developmental issues (Forgan, 2002; Iaquinta & Hipsky, 2006; Maich & Kean, 2004; Stamps, 2003), or more specifically promotes use to promote acceptance of individuals with disabilities (Iaquinta & Hipsky, 2006; Prater, Dyches, & Johnson, 2006), without specifying the length of intervention. For example, Maich and Kean summarize a variety of social-emotional issues that bibliotherapy might address,

including bullying, feelings, friendship, oppression, prejudice, problem solving, respect, special needs, and teasing, and suggest that, among its possible uses, bibliotherapy can be used as a preventative measure or as a single event when specific needs arise.

The idea of addressing students' attitudes towards individuals with disabilities by reading one book and talking about it may be attractive, as teachers have reported that fitting disability curriculum into a schedule already full of academic requirements is difficult (Gordon, 2008). A teacher may assume that having a class read and discuss a single book featuring a child with a disability at best changes attitudes and/or fulfills requirements for disability awareness, and at worst, is simply a benign reading of a book. In fact, over 75% of teacher respondents in a study examining disability awareness programs in elementary schools reported that they had chosen books for students to read to themselves or read books out loud to students that featured characters with disabilities to address disability awareness (Gordon 2008). However, the results of the current study demonstrated that brief bibliotherapy interventions can change immediate attitudes toward a more negative viewpoint. These findings were similar to the findings of Smith-D'Arezzo and Moore-Thomas (2010) in which reading one book over the course of 4 weeks reinforced some children's negative attitudes. The current study supports the premise that bibliotherapy needs to be more than a one-time intervention and the importance of additional research on how bibliotherapy can be incorporated with other interventions.

The bibliotherapy discussion in the current study highlighted the typicality of a child who used AAC. Focusing on typicality is different than the broader, frequently identified bibliotherapy goals of self-understanding, emotional catharsis, promotion of

relationships with others, building skills to meet day-to-day problems, behavior change, and/or gain in information and knowledge (Doll & Doll, 1997). The focus on positive typicality of characters with a variety of disabilities, and postulation of subsequent generalizability to all individuals with disabilities, was successful in Cameron and Rutland's (2006) 6-week bibliotherapy intervention. However, in the current study, a single bibliotherapy intervention focusing on the positive typicality of an individual with a single, specific area of disability (AAC use) did not produce the same results. This lends further support to the previous discussion regarding the importance of extended (rather than single) bibliotherapy intervention.

Based upon the findings of this study (specifically with regard to the more negative expression of attitude in the behavioral and affective domains immediately following intervention), the possibility of educators choosing to not use books about individuals with disabilities at all, out of fear that it might influence attitudes in a negative fashion, becomes a concern. This would be unfortunate, as bibliotherapy has shown to be an effective component of a comprehensive disability awareness program (Favazza & Odom, 1997; Favazza et al., 2000) and effective when used over a longer period of time, combined with a focus on the typicality of individuals with disabilities (Cameron & Rutland, 2006). Thus, rather than choosing to not use books about individuals with disabilities at all, practitioners might consider using bibliotherapy over an extended time period as well as combining bibliotherapy with other interventions such as viewing a video-tape of individuals using AAC and subsequent AAC role play (Beck & Fritz-Verticchio, 2003), and playing with peers with disabilities (Favazza & Odom, 1997; Favazza et al., 2000).

An additional consideration in the use of bibliotherapy to influence attitude toward individuals who have disabilities is its use in already inclusive classrooms. Self-perception theory (Bem, 1972) holds that people infer their attitudes from their own behaviors. Therefore, if children in an inclusive classroom were prompted and supported to interact in a prosocial manner with a peer who uses AAC, according to self-perception theory, they would then, based on their behavior, infer and form a positive attitude toward those who use AAC. Bibliotherapy could support this positive behavior and subsequent positive attitude, by reinforcing the normalcy and expectation of interactions and friendships with peers with disabilities. The results of this study support the idea that disability awareness and attitude change is not a one-time event, but instead should be part of a well-planned curriculum (Favazza et al., 2000). Introducing children to disability via bibliotherapy may be best considered as part of a comprehensive disability curriculum that commences in preschool and the early school years. Since schools' influence on attitudes is secondary only to that of parents (Oskamp & Shultz, 2005), and since negative attitudes form as young as age 3 (Longoria & Marini, 2006), educators have the potential, and some may argue, the responsibility, to make lasting differences that positively impact society. However, to successfully incorporate bibliotherapy into their classrooms, practitioners need to fully understand the strengths, as well as the limitations, of bibliotherapy.

Future Research

The current study has several implications for future research, both with regard to AAC specifically and to disability research in general. The teachers who participated in the research study all expressed to me, the primary investigator, their belief that the study

was of an obvious nature, and that "of course" reading a book about disability would positively influence their students' attitudes toward individuals who have disabilities, including those who use AAC. Results of this study demonstrate otherwise. Furthermore, given that reading a book is not the same as a bibliotherapy intervention, teachers' knowledge/beliefs about bibliotherapy, and their practice of bibliotherapy as a strategy for changing attitudes about disability, should be further examined.

Determining the ideal length of bibliotherapy interventions is another area to be explored. Anecdotal claims present single bibliotherapy intervention as sufficient for attitude change (Pardeck, 2005). However, the current study did not support the one-time premise, as it was not effective in positively changing attitudes toward peers who use AAC. Given the limited research base on bibliotherapy, a definitive number of interventions or length of time needed for efficacy has not been established. A 2-and-a-half week study (Beardsley, 1981) where a book was read every other day to classrooms of third grade students did not result in significant attitude changes toward children with physical disabilities, nor did a 4-week, one book, intervention by Smith-D'Arezzo and Moore-Thomas (2010) result in significantly improved attitudes of fifth grade students toward peers with learning disabilities. However, Favazza et al. (2000) found significant short-term gains in kindergarten children's attitudes toward people with disabilities after receiving a story only intervention 3 days a week for 6 weeks. Cameron and Rutland (2006) also found after a 6-week bibliotherapy intervention, significant change in attitudes of children ages 5 to 10 toward peers with disabilities. In order to increase the likelihood that bibliotherapy is effective, as well as efficient, further research needs to be

conducted regarding the most efficacious time period of bibliotherapy needed to positively influence attitudes.

Further investigation related to the various components of bibliotherapy (e.g., the content of books being read, the subsequent discussion) is also warranted. For example, examining the impact of different focal points (e.g., typicality) will help differentiate what aspects of bibliotherapy are most successful in changing attitudes. Additionally, given the different outcomes across gender in terms of the response to the intervention in the current research, the role of gender should be considered when examining bibliotherapy approaches.

Research examining whether bibliotherapy focusing on a specific area of disability (such as AAC users) impacts overall attitudes toward disabilities in general is also warranted. If the attitudes resulting from an intervention featuring a character with a specific disability generalize toward individuals with a wide range of disabilities, then educators have greater latitude in choosing literature. However, if generalization does not occur, educators would need to select and prioritize what specific disability types to present. Given the lack of characters with disabilities featured in literature (Blaska, 2004), this area of research is particularly important to explore.

The sustainability of attitude change is another area in need of investigation. Research suggests that sustained attitude change may be correlated with the intensity of the association with the attitude object (i.e., the stronger the association, the stronger the attitude; Fazio, 2007). In a study conducted by Favazza et al. (2000), acceptance of individuals with disabilities (attitude) levels dropped over a 5-month period post-intervention. Based on this, the authors postulated that year round, school-wide disability

acceptance programs might be needed to maintain changes. Studies exploring the extent to which bibliotherapy interventions can maintain change are warranted.

Finally, the use of bibliotherapy as a component of school wide disability awareness programs is an important area of future research. As teachers have indicated that they frequently choose to use literature when addressing disability awareness (Gordon, 2008), research exploring whether and how bibliotherapy fits into evidence based programs and practices will assist teachers in effectively implementing disability awareness and promotion of positive attitudes toward individuals with disabilities.

Conclusion

Individuals who use AAC have identified the elimination of attitudinal barriers as a research priority (O'Keefe et al., 2007). The current study did not support the use of a one-time bibliotherapy intervention focusing on the typicality and friendships of children who use AAC as a successful intervention for influencing positive attitudes toward individuals who use AAC. However, the current study did contribute to AAC, bibliotherapy, and attitudinal research. Specifically, the findings supported the importance of separately examining the affective, behavioral, and cognitive components of attitude. Furthermore, given that the one-time intervention resulted in more negative attitudes in the affective and cognitive domains, the current study highlighted the importance of additional research regarding the efficacy of bibliotherapy. Further exploration of bibliotherapy, either alone or as part of an overall school awareness program, will provide researchers and practitioners with important information that can be used to address the goal of eliminating attitudinal barriers toward individuals who use AAC.

APPENDIX A

BEN AND HIS THREE-POUND VOICE

"Hey, Ben," whispered Nate, nudging my desk. "Look at the board. You're Student of the Week in two weeks. What are you going to do?"

I shrugged and started worrying. I had been dreading this all year.

Nate turned all the way around in his desk. "You should show a video of your ski trip last year. That was crazy." His hands zoomed around like skis.

I started to point to my "I don't know" picture on my communication board, but Mrs. Martin had already caught us not paying attention. "Is there a problem gentleman? I certainly hope it is math you are discussing over there."

I could feel my cheeks turning red as the whole class turned to look at us. Nate never seems to mind being the center of attention. He just grinned at Mrs. Martin and said, "Sorry."

I hate it when everyone stares at me, although it happens so much you'd think I'd be used to it. My big sister Natalie says I should have a stack of cards to hand out that say, "So what! I was born this way. Just because I don't talk doesn't mean I can't hear you or see you." Worse than the staring and pointing, though, is when people pretend I don't exist at all.

What if everyone just ignored me during my Student of the Week presentation?

I was getting ready to leave for speech therapy, when Nate turned around in his desk again. “Want to come play video games at my house?”

I pointed to “no”, and then to “swim team.”

I see Ms. Herrera, my school speech therapist, on Tuesdays. She is always smiling, even when she talks. Sometimes I just stare at her mouth and wonder if she has to practice smiling and saying each word so clearly at the same time. Today her smile seemed even bigger than usual, and for once she was talking very excited and fast.

“Look! It came! Your VOCA finally came! You’d better work on your reading because you can say anything with this. Sentences you use a lot can be programmed in. Plus, we can scan in your math sheets. You can use the remote control and turn off lights. You can surf the Internet. Oh, and we need to choose a voice for your voice output. So, what do you think?”

When Ms. Herrera finally stopped to take a breath, I reached out and picked up the VOCA. It was the size of a piece of notebook paper and about two inches thick. I put the blue strap over my shoulder and across my body, and then pointed to “run” on my communication board.

“Of course you can run with it! It only weighs three pounds and the plastic covering is really strong. You’ll carry it everywhere you go. You can wear it at school, at home, while you play, while you eat, all the time. This is your voice now.”

While she made dinner, mom looked over the papers in my backpack. “How exciting! You’re student of the week soon. What do you want your classmates to know about you?”

“You like to sleep in?” said Emma.

"Your feet smell?" said Natalie.

"Grunt," said Barnaby.

"Why don't you show the class your new talker?" asked Mom. I knew she was going to say that. My mom's smile was about as big as Ms. Herrera's every time she looked at the VOCA.

I shook my head. I was excited to learn how to use it, but I wanted to do something really awesome for Student of the Week. Jason brought pictures of when his uncle let him fly his plane. Lily wore a ballet costume and showed a video of her ballet recital. Jean-Pierre and his mother made French food for the entire class to try.

"Mom!" squealed Emma "Barnaby just stole food from the table! That dog is disgusting. He needs to be trained." Barnaby was hiding in the corner, trying to look very small and licking mashed green avocado off his face.

Mom sighed. "Ben, can you please watch Barnaby while Emma finishes setting the table? You need to stop feeding him table scraps. He's so used to them now he helps himself."

I patted my leg and Barnaby skulked over and rested his head on my lap. Even without words Barnaby seems to sense what I mean. Then the idea came to me. I would train Barnaby to do tricks for the student of the week presentation! Everyone (except my sister) loves a giant dog. The only problem was that if Barnaby was coming to school, he needed to learn to do a really good trick.

Nate lives next door with his mom and brother. On nights his mom works, he likes to hang out at our house. "Cool," Nate commented, looking at my talker. "What does it do?"

Big surprise, Mom hustled over to show him. “It’s called a voice output communication aide, or VOCA. He can scroll through the screens and choose what to say by touching the word or he can type in words or choose certain sentences. Then the machine will say whatever he picks.”

Nate’s face broke into an enormous, freckled grin as he grabbed the instruction manual Mom had printed. “It says here you can control the TV remote! As in we could totally mess with my brother and he’d never know! Wow, you can do a lot with a three-pound voice!”

Mom spoke in her exasperated tone and took the manual back. “Well, yes, but the most important thing is that Ben will be able to talk with it.”

“Ben and I never have any problems understanding each other, Mrs. Swan,” Nate said. “But it will be great to hear him speak. What will his voice sound like?”

My mom showed him the people’s pictures that went with the voice options. “He can pick any of these.”

Nate punched me in the arm. “Pick the little old lady one and freak people out!”

“Honestly Nate! We’ll pick a voice closest to an eight-year-old boy. Now go play, you two, and take Barnaby with you. He needs some exercise.”

So I could learn to use my new talker, Mom and Ms. Herrera increased my speech therapy to three times a week with lots of after school practice. No matter how hard I shook my head “no” and pounded my swim team picture, they wouldn’t back down.

“Honey, this is really, really important,” Mom explained. “You’re only missing one practice a week. That’s not such a big deal.”

I wanted to tell her how I had to practice my backstroke. I wanted to tell her that Chloe kept beating me and then teasing me about losing to a girl. But I couldn't say any of that, so three times a week of speech it was.

Ms. Herrera and I worked on what screens went with what words, and how to make sentences. The voice that said the words sounded pretty real. I'd been worried it would sound like a robot. Mom wanted me to use the VOCA in my classroom right away. But Ms. Herrera was actually on my side and told her I could practice at home and at school speech therapy until I felt comfortable enough to use it all the time.

Natalie helped me research how to train a dog to freeze and then crawl away. It involved a lot of treats - something Barnaby really liked. Using my talker was easy with Barnaby. He didn't mind if I was slow to find the right words. In between training sessions I practiced using my VOCA to tell him about my day.

My family had to get used to my talker too. At dinner, Dad scolded Emma. "No electronics at the dinner table, Emma. Go put your game away or it's mine for the rest of the week."

"Hear that Ben?" Emma taunted, pointing at my talker. "No electronics at the dinner table."

"Ben's talker isn't a game, Emma!" Mom quickly said. "It's Ben's voice now and it goes everywhere he goes."

Ha! I had been waiting for this opportunity. "I told you so, Emma," I said.

"Mom!" Emma wailed. "No fair! He programmed that in as an entire sentence! He only has to touch the screen once to be rude to me! Make him change it!"

"Ben," Mom warned, "be nice to your sister." But she didn't make me change anything.

I was nervous on the day of my Student of the Week presentation. Mom brought Barnaby to school right before lunch. The class got very excited when he lumbered in.

"Oh my gosh! He's huge!" gasped Gabriella and backed away.

"What's that thing Ben's holding?" asked Jason, pointing at my VOCA. "Is that for zapping the dog if he's bad?"

I took a deep breath and walked Barnaby to the front of the class. "This is my dog Barnaby," I said, using my VOCA. "Don't worry, he is very friendly." Barnaby wagged his tail encouragingly and drooled. "And this," I said, pointing at my talker, "this is called a VOCA, and it's how I talk now."

Everyone was leaning forward in their desks, and the room was filled with whispering. "Quiet class," commanded Mrs. Martin.

I found the word I wanted and looked straight at Barnaby, "Freeze." Barnaby fell over, just like we had practiced! I stepped in front of him. "Now don't try crawling away or you'll be in big trouble." Again, just as I had trained him to do, as soon as I turned my back on him, Barnaby began to crawl. All the kids started laughing and pointing and shouting. "Freeze!" I said, and Barnaby froze again. He froze and crawled three more times, until he was almost to the door. "Ok, good boy, Barnaby. Come take your bow."

Barnaby was walking towards me, but suddenly he stopped by Mrs. Martin's desk. His head lunged forward, his tongue darted out, and he gobbled half of her sandwich that was sitting out for her to take to lunch. My mom gasped, and then I was the

one who froze. What happens to kids whose dog steals the teacher's food? The room was silent, except for the sound of Barnaby licking crumbs off his mouth.

It was up to me. I touched the "come" command again, and this time Barnaby listened.

I snuck a glance at Mrs. Martin, and she was laughing! "Thanks Barnaby. I really wanted hot lunch anyway. It's pizza day. Now who would like to meet Barnaby and look at Ben's new talker?"

The class swarmed around Barnaby and me, and Mom gave me a thumbs up from the corner of the room.

Chloe was one of the last kids to get near me, and she whispered, "Just because you can talk now doesn't mean you still won't lose to a girl."

I smiled. Some things never change.

APPENDIX B

IMAGES AND ENCOUNTERS PROFILE (BLASKA, 1996)

Reviewer:

_____

Date:

_____

Book: Ben and His Three-Pound Voice, by Betsy Kanarowski, illustrated by Laura Sihvonen___

1. Promotes empathy, not pity

   Yes ___ No ___

   Comments_____

   _____

2. Depicts acceptance not ridicule

   Yes ___ No ___

   Comments_____

   _____

3. Emphasizes success rather than, or in addition to, failure

   Yes ___ No ___

   Comments_____

   _____

4. Promotes positive images of persons with disabilities or illness

   Yes ___ No ___

   Comments_____

   _____

5. Assists children in gaining accurate understanding of the disability or illness

   Yes ___ No ___

   Comments_____

   _____

6. Demonstrates respect for persons with disabilities or illness

   Yes ___ No ___

   Comments_____

   _____

7. Promotes attitude of "one of us" not "one of them"

   Yes ___ No ___

   Comments_____

   _____

8. Uses language which stresses person first, disability second philosophy

   Yes ___ No ___

   Comments_____

   _____

9. Describes the disability or person with disabilities or illness as realistic (i.e. not subhuman or superhuman)

   Yes ___ No ___

Comments_____

_____

10. Illustrates characters in a realistic manner

Yes ___ No ___

Comments_____

_____

APPENDIX C

BIBLIOTHERAPY EVALUATION TOOL (BIBLIOTHERAPY EDUCATION PROJECT, 2007)

Title: Ben and His Three-Pound Voice

Author: Betsy Kanarowski

Illustrator: Laura Sihvonen

Publisher: n/a

Publication Date: n/a

Subjects:

Format: Children's book

Illustrations: Color

Language(s): English

Reviewer:

Reviewed on:

General Format/Structure

- Can major aspects of this story be applied to different situations?

  Yes ___ No ___

  Comments

  _____

_____

_____

- Is the plot cohesive?

  Yes ___ No ___

  Comments

  _____

  _____

  _____

- Are the characters well developed?

  Yes ___ No ___

  Comments

  _____

  _____

  _____

- Is the book well written?

  Yes ___ No ___

  Comments

  _____

  _____

  _____

- Is factual information presented objectively?

  Yes ___ No ___

Comments

_____

_____

_____

- Are the fictional situations realistically depicted?

  Yes ___ No ___

  Comments

  _____

  _____

  _____

Subject Matter

Evaluator through the book's themes were appropriate for the following groups:

Preschool/0-5 yrs ___ Kindergarten/5-6 ___ Grade 1-2/6-8 yrs___

Grade 3-4/8-10 yrs ___ Grade 5-6/10-12 yrs ___ Grade 7-8/12-14 yrs ___

High school ___ Adult ___

- Is the subject matter of enduring interest?

  Yes ___ No ___

  Comments

  _____

  _____

  _____

- Is the subject matter outdated?

  Yes ___ No ___

Comments

_____

_____

_____

- Does the story/text offer possible solutions to problems presented?

  Yes ___ No ___

  Comments

  _____

  _____

  _____

- How engaging is the subject matter?

  Boring ___ Engaging ___ Very Engaging ____

- How engaging is the story?

  Boring ___ Engaging ___ Very Engaging ___

Reading Level/Suitability

Evaluator thought the vocabulary was suitable for the following grade levels:

Preschool/0-5 yrs ___ Kindergarten/5-6 ___ Grade 1-2/6-8 yrs___

Grade 3-4/8-10 yrs ___ Grade 5-6/10-12 yrs ___ Grade 7-8/12-14 yrs ___

High school ___ Adult ___

- Is the book fun to read?

  Yes ___ No ___

  Comments

  _____

_____

_____

- Is the vocabulary of the book appropriate for the reading level of the target audience?

  Yes ___ No ___

  Comments

  _____

  _____

  _____

Book Length

- Is the book set up in a chapter format that lends itself to serial or ongoing use?

  Yes ___ No ___

  Comments

  _____

  _____

  _____

- Is the book's length appropriate for the reading level of the target audience?

  Yes ___ No ___

  Comments

  _____

  _____

  _____

- Does the book length allow for use with clients with special attentional needs?

Yes ___ No ___

Comments_____

_____

_____

Text & Pictures

- Does the font match the story content and tone?

  Yes ___ No ___

  Comments_____

  _____

  _____

- Is the text too dense for read-aloud or read-together activities?
- Yes ___ No ___

  Comments

  _____

  _____

  _____

- Evaluate the size of the text:

  Too small ___ Correct size ___ Too large ___

- Illustrations:

  Color ___ Black and white ___

  Other_____

- Are the pictures developmentally appropriate?

  Yes ___ No ___

Comments

_____

_____

_____

- Are the pictures attractive?

  Yes ___ No ___

  Comments

  _____

  _____

  _____

- Is there permission to reprint?

  Yes ___ No ___

  Comments

  _____

  _____

  _____

- Is the layout of the illustrations appropriate to the text?

  Yes ___ No ___

  Comments

  _____

  _____

  _____

- Do the pictures enhance the story?

Yes ___ No ___

Comments

_____

_____

_____

- Are the illustrations well done?

  Yes ___ No ___

  Comments

  _____

  _____

  _____

- Rate the style of the illustration:

  Abstract ___ Realistic ___

- How engaging are the pictures:

  Boring ___ Engaging ___ Very Engaging ____

- Evaluate the number of pictures:

  Too few ___ Correct number ___ Too many ___

Developmental Level

Evaluator considers this book appropriate for the following reading levels:

Preschool/0-5 yrs ___ Kindergarten/5-6 ___ Grade 1-2/6-8 yrs___

Grade 3-4/8-10 yrs ___ Grade 5-6/10-12 yrs ___ Grade 7-8/12-14 yrs ___

High school ___ Adult ___

The age(s) of the main character(s) is/are:

_____

- Do the themes match the developmental level of the target audience?

  Yes ___ No ___

  Comments

  _____

  _____

  _____

- Can this book be used with clients at a variety of developmental levels?

  Yes ___ No ___

  Comments

  _____

  _____

  _____

Diversity Factors

The evaluator thought the following elements of the book reflect or suggest diversity:

_____

_____

_____

_____

The gender for the main character is: Male ___ Female ___

- Does the book convey respect for all groups referred to in the reading?

  Yes ___ No ___

Comments

_____

_____

_____

- Does the book avoid stereotypes?

  Yes ___ No ___

  Comments

_____

_____

_____

Context/Environment or Situation/Use

- Is this a book that the evaluator would enjoy using multiple times?

  Yes ___ No ___

  Comments

_____

_____

_____

- Is this book a good value for the money?

  Yes ___ No ___

  Comments

_____

_____

_____

- Is the book reproducible?

  Yes ___ No ___

  Comments

  _____

  _____

  _____

- Did the evaluator think there were elements that might be of a sensitive nature?

  Yes ___ No ___

  Comments

  _____

  _____

  _____

- Evaluate how specialized the content of this book is:

  Highly specialized ___ Versatile ___ Very Versatile ___

Therapeutic Use

The evaluator suggested the following possible uses for this book:

_____

_____

_____

- Does the content promote discussion?

  Yes ___ No ___

  Comments

  _____

_____

_____

- Does the content facilitate client growth?

  Yes ___ No ___

  Comments

  _____

  _____

  _____

- Does the book explore problems that need to be introduced to children?

  Yes ___ No ___

  Comments

  _____

  _____

  _____

- Does the book explore problems that need to be introduced to adolescents?

  Yes ___ No ___

  Comments

  _____

  _____

  _____

- Are there pictures that ask for a response from the reader?

  Yes ___ No ___

Comments

_____

_____

_____

- Do the pictures enhance the child's desire to draw or create more related to the story?

  Yes ___ No ___

  Comments

  _____

  _____

  _____

Additional Evaluation Considerations

- Describe the values/benefits of this book in a therapeutic setting:

  _____

  _____

  _____

- Describe the drawbacks to the use of this book in a therapeutic setting:

  _____

  _____

  _____

- Describe any content in this book that could cause political problems:

_____

_____

_____

- Describe any content in this book that could cause emotional trauma:

_____

_____

_____

- Describe any content in this book that may be inappropriate for certain populations or settings:

_____

_____

_____

- Composite impression of the therapeutic value of the book and recommendation to other counselors:

_____

_____

_____

- Suggested use with clients/client reactions observed:

_____

_____

_____

- How comfortable would you be reading or giving his book to a client

  Very Comfortable ___ Comfortable ___

Not Comfortable ___

Composite Rating

Poor ___ Fair ___ Good ___ Excellent ___

APPENDIX D

PRETEST AND INSTRUCTIONS

"Now you will answer some questions. These are your answer sheets. After I ask each question, you will mark an X on the happy face for yes, an X on the sad face for no, or an X on the maybe face for maybe. You can only pick one face per question."

"Here is a practice one first: Dogs make good pets. Put an X on the happy face if you think dogs make good pets. Put an X on the sad face if you don't think dogs make good pets. Put an X on the maybe face if you think dogs maybe make good pets."

"I want to know how you think or feel about every question, and remember, whatever you think or feel, that is the right answer."

"Now, put an X on the picture of a girl if you are a girl, or put an X on the picture of the boy if you are a boy. Please write your age in the blank where it asks for your age."

If a child should ask a question, the planned response is "Let me read the question again. Think about it, and answer as best as you can."

Practice question:

Yes

No

Maybe

Girl

Boy

I am _____ years old.

1. People can use AAC instead of talking.


Yes


No


Maybe

2. Are people who use AAC scary to talk to?


Yes


No


Maybe

3. Would you go up and talk to a kid who uses AAC?


Yes


No


Maybe

APPENDIX E

AAC INTRODUCTION SCRIPT

"Today we are going to read a book and talk about augmentative and alternative communication. A lot of times people call it AAC for short. AAC is something that can be used by people of all ages who have difficulties talking." (Investigator writes AAC on the white board).

"There are different reasons why a person might need to use AAC to talk. He or she might have been born unable to talk, or had an accident that made it difficult to speak. There are different types of AAC to help people communicate."

"One type of AAC is sign language. Sign language is a way of communicating where a person uses his or her hands, facial expressions, and body to talk. Here is how you say thank you in sign language."

"Sometimes the AAC people use could be pictures or symbols that they point to. Here are some pictures that a first grader might use." (Investigator shows page with PECS pictures)

"Other times, people who use AAC might have what is called a voice output communication aide, or VOCA, for short. A VOCA can look sort of like a little computer or iPad. The person chooses on the screen what he or she wants to say, and the VOCA says it. Here is a picture of a VOCA." (Investigator shows picture of a VOCA).

APPENDIX F

AAC ACCEPTANCE SCALE FOR YOUNG CHILDREN

Practice question:


Yes


No


Maybe

Girl

Boy

I am _____ years old.

1. AAC is a different way of talking.


Yes


No


Maybe

2. Would you move to another chair if a kid who uses AAC sat next to you?


Yes


No


Maybe

3. Kids and grown-ups can use AAC.


Yes


No


Maybe

4. Would you invite a kid who uses AAC to your birthday party?


Yes


No


Maybe

5. Would you play with a kid even if he or she looked different?


Yes


No


Maybe

6. Do kids who use AAC scare you?


Yes


No


Maybe

7. Is pointing at pictures a kind of AAC that some kids use?


Yes


No


Maybe

8. Would you still talk to a kid even if he or she used AAC?


Yes


No


Maybe

9. Are kids who use AAC fun to be with?


Yes


No


Maybe

10. Would you like to spend your recess with a kid who uses AAC?


Yes


No


Maybe

11. Do you like kids who use AAC?


Yes


No


Maybe

12. A kid might use AAC because he or she can't talk.


Yes


No


Maybe

13. Would you invite a kid who can't talk to play at your house?


Yes


No


Maybe

14. Would you feel happy around a kid who uses AAC?


Yes


No


Maybe

15. Could a kid use AAC to talk at school?


Yes


No


Maybe

APPENDIX G

CONTROL BOOK DISCUSSION

1. What do you think your librarian would do if you sent her a DVD like that?
2. What is something that the students did to the books that upset the librarian?
3. What is another thing the students did to the books that upset the librarian?
4. Did it make sense for Carlos to organize the books by color? Why or why not?
5. What do you think would happen if kids didn't have to check out library books?
6. Why is it important to take care of library books?
7. What is something that you do to make sure library books stay nice for other people?
8. Draw a picture of how you treat a library book, or how you act in the library.

APPENDIX H

AAC ACCEPTANCE SCALE FOR YOUNG CHILDREN INSTRUCTION SCRIPT

"Now you will answer some more questions. These are your answer sheets. After I ask each question, you will mark an X on the happy face for yes, an X on the sad face for no, or an X on the maybe face for maybe. You can only pick one face per question."

"Here is a practice one first: Babies cry too much. Put an X on the happy face if you think babies cry too much. Put an X on the sad face if you don't think babies cry too much. Put an X on the maybe face if you think maybe babies cry too much."

"I want to know how you think or feel about every question, and remember, whatever you think or feel, that is the right answer."

"Now, put an X on the picture of a girl if you are a girl, or put an X on the picture of the boy if you are a boy. Please write your age in the blank where it asks for your age."

After every three questions, the instructions will be repeated for clarity.

If a child should ask a question, the planned response is "Let me read the question again. Think about it, and answer as best as you can."

APPENDIX I

EXPERIMENTAL GROUP DISCUSSION

1. What kind of AAC did Ben use to talk at the beginning of the story? What kind of AAC did he use at the end of the story?
2. What were some of the things you liked about Ben?
3. In what ways did Ben's friend Nate show that it didn't matter that Ben couldn't talk?
4. Have you ever felt nervous about standing up in front of the class like Ben did? Tell about that time.
5. In what ways are children who use AAC like Ben?
6. In what ways are children who use AAC like you?
7. In what ways are they different?
8. If you were friends with a kid who uses AAC, what would you do together? Draw a picture of you and your friend who uses AAC doing something together.

APPENDIX J

PROCEDURAL FIDELITY DATA COLLECTION FORM

Below are the scripts for the research study. Please mark yes or no if the investigator followed the scripts.

AAC Introduction Script

STATEMENT OR ACTION	YES	NO
Today we are going to read a book and talk about augmentative and alternative communication.		
A lot of times people call it AAC for short.		
AAC is something that can be used by people of all ages who have difficulties talking.		
Investigator writes AAC on the white board		
There are different reasons why a person might need to use AAC to talk		
He or she might have been born unable to talk, or had an accident that made it difficult to speak.		
There are different types of AAC to help people communicate.		
One type of AAC is sign language.		
Sign language is a way of communicating where a person uses his or her hands, facial expressions, and body to talk.		
Here is how you say thank you in sign language.		
Now you try.		
Sometimes the AAC people use could be pictures or symbols that they point to.		
Here are some pictures that a first grader might use.		

Investigator shows pictures.		
Other times, people who use AAC might have what is called a voice output communication aide, or VOCA, for short.		
A VOCA can look sort of like a little computer or iPad.		
The person chooses on the screen what he or she wants to say, and the VOCA says it.		
Here is a picture of a VOCA.		
Investigator shows a picture of a VOCA.		

Pretest Data

STATEMENT OR ACTION	YES	NO
Now you will answer some questions.		
These are your answer sheets.		
After I ask each question, you will mark an X on the happy face for yes, an X on the sad face for no, or an X on the maybe face for maybe.		
You can only pick one face per question		
Here is a practice one first: Dogs make good pets.		
Put an X on the happy face if you think dogs make good pets.		
Put an X on the sad face if you don't think dogs make good pets.		
Put an X on the maybe face if you think dogs maybe make good pets.		
I want to know how you think or feel about every question, and remember, whatever you think or feel, that is the right answer.		
Now, put an X on the picture of a girl if you are a girl, or put an X on the picture of the boy if you are a boy.		
Please write your age in the blank where it asks for your age.		
People can use AAC instead of talking.		
Are people who use AAC scary to talk to?		
Would you go up and talk to a kid who uses AAC?		

Experimental Group Discussion Script

STATEMENT OR ACTION	YES	NO	TIME
What kind of AAC did Ben use to talk at the beginning of the story? What kind of AAC did he use at the end of the story?			
What were some of the things you liked about Ben?			
In what ways did Ben's friend Nate show that it didn't matter that Ben couldn't talk?			
Have you ever felt nervous about standing up in front of the class like Ben did? Tell about that time.			
In what ways are children who use AAC like Ben?			
In what ways are children who use AAC like you?			
In what ways are they different?			
If you were friends with a kid who uses AAC, what would you do together?			
Draw a picture of you and your friend who uses AAC doing something together.			

Control Group Discussion Script

STATEMENT OR ACTION	YES	NO	TIME
What do you think your librarian would do if you sent her a DVD like that?			
What is something that the students did to the books that upset the Librarian?			
What is another thing the students did to the books that upset the librarian?			
Did it make sense for Carlos to organize the books by color? Why or why not?			
What do you think would happen if kids didn't have to check out library books?			
Why is it important to take care of library books?			
What is something that you do to make sure library books			

stay nice for other people?			
Draw a picture of how you treat a library book, or how you act in the library			

AAC Acceptance Scale for Young Children Instruction Script

STATEMENT OR ACTION	YES	NO
Now you will answer some more questions.		
These are your answer sheets.		
You can only pick one face per question.		
Here is a practice one first: Babies cry too much.		
Put an X on the happy face if you think babies cry too much.		
Put an X on the sad face if you don't think babies cry too much.		
Put an X on the maybe face if you think maybe babies cry too much.		
I want to know how you think or feel about every question, and remember, whatever you think or feel, that is the right answer.		
If a child should ask a question, the planned response is "Let me read the question again. Think about it, and answer as best as you can." (Mark yes or no each time a question is asked and the statement is used/not used correctly).		

AAC Acceptance Scale for Young Children

STATEMENT OR ACTION	YES	NO
1. AAC is a different way of talking.		
2. Would you move to another chair if a kid who uses AAC sat next to you?		
3. Kids and grown-ups can use AAC		
4. Would you invite a kid who uses AAC to your birthday party?		
5. Would you play with a kid even if he or she looked different?		

Remember, put an X on the happy face if your answer is yes, put an X on the sad face if your answer is no, and put an X on the maybe face if your answer to my question is maybe.		
6. Do kids who use AAC scare you?		
7. Is pointing at pictures a kind of AAC that some kids use?		
8. Would you still talk to a kid even if he or she used AAC?		
9. Are kids who use AAC fun to be with?		
10. Would you like to spend your recess with a kid who uses AAC?		
Remember, put an X on the happy face if your answer is yes, put an X on the sad face if your answer is no, and put an X on the maybe face if your answer to my question is maybe.		
11. Do you like kids who use AAC?		
12. A kid might use AAC because he or she can't talk		
13. Would you invite a kid who can't talk to play at your house?		
14. Would you feel happy around a kid who uses AAC?		
15. Could a kid use AAC to talk at school?		

REFERENCES

Agness, P. J. (1980). Effects of bibliotherapy on fourth and fifth graders' perceptions of physically disabled individuals. (Doctoral dissertation, Ball State University,1980). *ProQuest Dissertations and Theses Database*. (AAT 8104892)

Aiex, N. K. (1993). *Bibliotherapy.* (Report No. 82, EDO-CS-93-05) Bloomington, IN: ERIC Clearinghouse on Reading, English and Communication Digest.

Albarracin, D., Johnson, B. T., Zanna, M. P. & Kumkale G. T. (2005). Attitudes: Introduction and scope. In D. Albarracin, B. T. Johnson, & M. P. Zanna (Eds.), *The handbook of attitudes* (pp. 79-124). New York, NY: Psychology Press.

Allport, G. W. (1954). *The nature of prejudice.* Cambridge, MA: Addison-Wesley.

Antonak, R. F., & Livneh, H. (2000). Measurement of attitudes towards persons with disabilities. *Disability and Rehabilitation, 22*(5), 211-224. doi:10.1080/096382800296782

Barnette, J. J. (2010). Likert Scaling. In Neil J. Salkind (Ed), *Encyclopedia of research design* (pp. 715-719). Thousand Oaks, CA: Sage.

Batalova, J., & McHugh, M. (2010). *Number and growth of students in US schools in need of english instruction.* Washington DC: Migration Policy Institute. Retrieved from http:www.migrationpolicy.org/ellinfo.html

Beardsley, D. A. (1981). Using books to change attitudes toward the handicapped among third graders. *Journal of Experimental Education, 50*(2), 52-55.

Beck, A. R., Bock, S., Thompson, J. R., & Kosuwan, K. (2002). Influence of communicative competence and augmentative and alternative communication technique of children's attitudes toward a peer who uses AAC. *Augmentative and Alternative Communication, 18(4),* 217-227.

Beck, A. R., & Dennis, M. (1996). Attitudes of children toward a similar-aged child who uses augmentative and alternative communication. *Augmentative and Alternative Communication, 12,* 78-87.

Beck, A. R., & Fritz-Verticchio, H. (2003). The influence of information and role-playing experiences on children's attitudes toward peers who use AAC. *American Journal of Speech- Language Pathology, 12(1),* 51-60.

Beck, A. R., Fritz, H., Keller, A., & Dennis, M. (2000). Attitudes of school-aged children toward their peers who use augmentative and alternative communication. *Augmentative and Alternative Communication, 16,* 13-26.

Beck, A. R., Kingsbury, K., Neff, A., & Dennis, M. (2000). Influence of length of augmented message on children's attitudes towards peers who use augmentative and alternative communication. *Augmentative and Alternative Communication, 16,* 239-249.

Bem, D. J. (1972). Self-perception theory. In L. Berkowitz (Ed.), *Advances in experimental social psychology,* (pp. 1-62). New York, NY: Academic Press.

Beukelman, D., & Mirenda, P. (2005). *Augmentative and alternative communication: Supporting children and adults with complex communication needs* (3rd ed.). Baltimore, MD: Paul Brookes Publishing Co.

Bibliotherapy Education Project (2007). *Bibliotherapy evaluation tool.* Las Vegas, NV: UNLV Libraries and College of Education.

Blaska, J. K. (2004). Children's literature that includes characters with disabilities or illness. *Disability Studies Quarterly 24*(1).

Blaska, J. K. (1996). *Using children's literature to learn about disabilities and illness.* Moorhead, MN: Practical Press.

Blockberger, S., Armstrong, R., O'Connor, A., & Freeman, R. (1993). Children's attitudes toward a nonspeaking child sing various augmentative and alternative communication techniques. *Augmentative and Alternative Communication, 9,* 243-250.

Brill, J. E. (2008). Likert Scale. In Paul J. Lavkaras (Ed.), *Encyclopedia of Survey Research Methods* (pp. 428-431). Thousand Oaks, CA: Sage. doi:10.4135/9781412963947

Cameron, L., & Rutland, A. (2006). Extended contact through story reading in school: Reducing children's prejudice toward the disabled. *Journal of Social Issues, 62*(3), 469-488.

Cameron, L., Rutland, A., Brown, R., & Douch, R. (2006). Changing children's intergroup attitudes toward refugees: Testing different models of extended contact. *Child Development 77*(5) 1208-1219.

Dada, S., & Alant, E. (2002). A comparative study of the attitudes of teachers at special and educationally inclusive schools towards learners with little or no functional

speech using communication devices. *South African Journal of Education, 22*(3), 223-228.

DeFluer, M. L., & Westie, F. R. (1963). Attitude as a scientific concept. *Social Forces, 42,* 17-31.

Delvin, R. & Pothier, D. (2006). Introductions: Toward a critical theory of dis-citizenship. In R. Delvin & D. Pothier (Eds.), *Critical disability theory: Essays in philosophy, politics, policy, and law* (pp. 1-22). Vancouver B.C.: UBC Press.

Doll, B. & Doll, C. (1997). *Bibliotherapy with young people.* Englewood, CO: Libraries Unlimited, Inc.

Donoghue, M. R. (2009). *Language arts: Integrating skills for classroom teaching.* Thousand Oaks, CA: SAGE Publications Inc.

Drew, C. J., Hardman, M. L., & Hosp, J. L. (2008). *Designing and conducting research in education.* Thousand Oaks, CA: SAGE Publications Inc.

Dudek, K., Beck, A. R., & Thompson, J. R. (2006). The influence of AAC device type, dynamic vs. static screen, on peer attitudes. *Journal of Special Education Technology, 21*(1), 17-27.

Dyches, T. T. & Prater, M. A. (2000). *Developmental disability in children's literature: Issues and annotated bibliography.* Reston, VA: Council for Exceptional Children.

Dyches, T. T. & Prater, M. A. (2005). Characterization of developmental disability in children's fiction. *Education and Training in Developmental Disabilities, 40*(3), 202-216.

Fabrigar, L. R., MacDonald, T. R., & Wegener, D. T. (2005). The structure of attitudes. In D. Albarracin, B. T. Johnson, & M. P. Zanna (Eds.), *The handbook of attitudes* (pp. 79-124). New York, NY: Psychology Press.

Favazza, P. C., & Odom, S. L. (1996). Use of the acceptance scale to measure attitudes of kindergarten age children. *Journal of Early Intervention, 20*(3), 232-249.

Favazza, P. C., & Odom, S. L. (1997). Promoting positive attitudes of kindergarten-age children toward people with disabilities. *Exceptional Children, 63*(3), 405-418.

Favazza, P. C., & Odom, S. L. (1999). *Acceptance scale for kindergarten – revised* Boulder, CO: Roots and Wings.

Favazza, P. C., Phillipsen, L., & Kumar, P. (2000). Measuring and promoting acceptance of young children with disabilities. *Exceptional Children, 66*(4), 491-508.

Fazio, R. H. (2007) Attitudes as object-evaluation associations of varying strength. *Social Cognition 25*(5), 603-637.

Fishbein, M., & Ajzen, I. (1975). *Belief, attitude, intention, and behavior: An introduction to theory and research.* Reading, MA: Addison-Wesley.

Forgan, J. W. (2002). Using bibliotherapy to teach problem solving. *Intervention in School and Clinic, 38(2), 75-82.*

Gibbons, J. D., & Chakraborti, S. (2011). *Nonparametric statistical inference (5th ed.).* Boca Raton, FL: Chapman & Hall/CRC.

Gladding, S. T., & Gladding, C. (1991). The ABC's of bibliotherapy for school counselors. *School Counselor, 39*(1), 7-11.

Gordon, L. S. (2008). A preliminary investigation of awareness in the curriculum and teachers' attitudes toward inclusion in new york state elementary schools. (Doctoral dissertation, State University of New York at Albany, 2008). *ProQuest Dissertations and Theses Database.* (UMI 3332974)

Gorenflo, C. W., & Gorenflo, D. (1997). Effects of synthetic speech, gender and perceived similarity on attitudes toward the augmented communicator. *Augmentative and Alternative Communication, 13,* 87-91.

Gorenflo, C. W., Gorenflo, D., & Santer, S. (1994). Effects of synthetic voice output on attitudes toward the augmented communicator. *Journal of Speech and Hearing Research, 37,* 64-68.

Hines, B. M. (1984). A study of the effect of children's literature with nonstereotyped black characters on the racial attitudes of sixth-grade children. (Doctoral dissertation, Northwestern State University of Louisiana, 1984). *ProQuest Dissertations and Theses Database.* (AAT 8415017)

Holcomb, N. (1990). *Sarah's surprise.* Hollidaysburg, PA: Jason and Nordic Publishers.

Huer, M., & Lloyd, L. (1990). AAC users' perspectives on augmentative and alternative communication. *Augmentative and Alternative Communication, 6,* 242-249.

Hymel, S. (1986). Interpretations of peer behavior: Affective bias in childhood and adolescence. *Child Development, 57,* 431-445.

Iaquinta, A., & Hipsky, S. (2006). Practical bibliotherapy strategies for the inclusive elementary classroom. *Early Childhood Education Journal, 34*(3), 209-213. doi:10.1007/s10643-006-0128-5

International Society for Augmentative and Alternative Communication. (2004). *About AAC: Who benefits?* Retrieved from http://isaac-online.org/en/aac/who_benefits.html

Jackson, E. P. (1944). Effects of reading upon attitudes toward the negro race. *The Library Quarterly, 14*(1), 47-54.

Jacoby, J., & Matell, M. S. (1971). Three-point likert scales are good enough. *Journal of Marketing Research, 8,*495-500.

Katz, E. (1960). The functional approach to the study of attitudes. *Public Opinion Quarterly, 45,* 61-78.

Kessler Foundation/National Organization on Disability. (2010). *Kessler Foundation/NOD 2010 surveys of Americans with disabilities.* Retrieved from: http://www.2010disabilitysurveys.org/indexold.html

Lenowsky, R. S. (1987). Bibliotherapy: A review and analysis of the literature. *The Journal of Special Education, 21*(2), 123-132.

Liebkind, K., & McAlister, A. L. (1999). Extended contact through peer modeling to promote tolerance in Finland. *European Journal of Social Psychology, 29,* 765-780.

Light, J. (1989). Toward a definition of communicative competence for individuals using augmentative and alternative communication systems. *Augmentative and Alternative Communication, 5,* 137-144.

Lilienfeld, M., & Alant, E. (2002). Attitudes of children toward an unfamiliar peer using an AAC device with and without voice output. *Augmentative and Alternative Communication. 18(2),* 91-101.

Litcher, J. H., & Johnson, D. W. (1969). Changes in attitudes toward negroes of white elementary school students after use of multiethnic readers. *Journal of Educational Psychology, 60*(2), 148-152.

Longoria, L., & Marini, I. (2006). Perceptions of children's attitudes towards peers with a severe physical disability. *Journal of Rehabilitation, 72*(3), 19-26.

Macke, R. (1992). Preservice teacher attitudes towards nonvocal individuals using high-technology augmentative alternative communication devices versus low-technology communication boards. (Doctoral dissertation, University of North Texas, 1992). *ProQuest Dissertations and Theses Database*. (AAT 9311324)

Makas, E. (1988). Positive attitudes toward disabled people: Disabled and non-disabled persons' perspectives. *Journal of Social Issues, 44,* 49-61.

Maich, K., & Kean, S. (2004). Read two books and write me in the morning! Bibliotherapy for social emotional intervention in the inclusive classroom. *Teaching Exceptional Children Plus, 1*(2), Retrieved from http://escholarship.bc.edu/education/tecplus/vol1/iss2/5

McCarthy, J., & Light, J. (2005). Attitudes toward individuals who use augmentative and alternative communication: Research review. *Augmentative and Alternative Communication, 21*, 41-55. doi:10.1080/07434610410001699753

Morton, C. (2010). *The library pages.* Janesville, WI: Upstart Books.

National Association of Cognitive Behavioral Therapists. (2009). *Cognitive Behavioral Therapy.* Retrieved from http://nacbt.org/whatiscbt.htm

National Collaborative on Workforce and Disability/Youth (2008). *Attitudinal barriers for people with disabilities.* Retrieved November 14, 2008, from http://www.ncwd youth.info/resources_&_Publications/disability_Basics/attitudinal_barriers.html

National Organization on Disability. (2000). *Executive Summary: 2000 N.O.D./Harris survey of Americans with disabilities.* Retrieved from: http://nod.org/research_publications/nod_harris_survey/2000_survey_of americans_with_disabilities/

Noether, G.E. (1987). Sample size determination for some common nonparametric tests. *Journal of the American Statistical Association, 82,* 645-647.

O'Keefe, B. M., Kozak, N. B., & Schuller, R. (2007). Research priorities in augmentative and alternative communication as identified by people who use AAC and their facilitators. *Augmentative and Alternative Communication, 23*(1), 89-96. doi:10.1080/07434610601116517

Oskamp, S., & Schultz, P. W. (2005). *Attitudes and opinions* (3rd ed.). Mahwah, N.J.: Lawrence Erlbaum Associates, Inc.

Pardeck, J. T. (2005). Using children's books as an approach to enhancing our understanding of disability. *Journal of Social Work in Disability and Rehabilitation, 4*(1/2), 77-85.

Pardeck, J. A. & Pardeck, J. T. (1993). *Bibliotherapy: A clinical approach for helping children.* Amsterdam: Gordon and Breach Science Publishers.

Park City School District (2012). *District statistics.* Retrieved from http://www.pcschools.us/index,php?page=263

Pehrsson, D. E. & McMillan, P. (May, 2005). *Advocating for clinicians, students, and clients: The bibliotherapy education project.* Workshop presented at PsySR-CSJ

(Psychologists for Social Responsibility and Counselors for Social Justice) Conference, Portland, OR.

Penney, D. (1990). Bibliotherapy as a method of attitude change. (Doctoral dissertation, University of New Brunswick, 1990). *ProQuest Dissertations and Theses Database.* (AAT MM59482)

Prater, M. A., Dyches, T. T., & Johnstun, M. (2006). Teaching students about learning disabilities through children's literature. *Intervention in School and Clinic, (42)*1, 14-24.

Riordan, R. J., Mullis, F., & Nuchow, L. (1996). Organizing for bibliotherapy: The science in the art. *Individual Psychology, 52*(2), 169-180.

Schmitt, N. (1996). Uses and abuses of coefficient alpha. *Psychological Assessment, 8*(4), 350-353.

Shapiro, A. (1999). *Everybody belongs: Changing negative attitudes toward classmates with disabilities.* New York, NY: Garland Publishing, Inc.

Smith-D'Arezzo, W. M., & Moore-Thomas, C. (2010). Children's perceptions of peers with disabilities. *Teaching Exceptional Children Plus, 63*(3), Article 2. Retrieved from http://escholarship.bc.edu/education/techplus/vol6/iss3/art2

Stamps, L. (2003). Bibliotherapy: How books can help students cope with concerns and conflicts. *Delta Kappa Gamma Bulletin, 70*(1), 25-29.

Standley, F., & Standley, N. (1970). An experimental use of black literature at a predominantly while university. *Research in Teaching English, 4,* 139-148.

Vignes, C., Coley, N., Grandjean, H., Godeau, E., & Arnaud, C. (2008). Measuring children's attitudes towards peers with disabilities: A review of instruments. *Developmental Medicine and Child Neurology, 50,* 182-189.

Wang, L., & Fan, X. (1997). *The effect of cluster sampling design in survey research on the standard error statistic.* Paper presented at the Annual Meeting of the American Educational Research Association, Chicago, IL.

World Media Group, LLC (2012). *Park city school district income and careers.* Retrieved from http://www.usa.com/school-district-4900750-income-and-careers.htm

Wright, S. C., Aron, A., McLaughlin-Volpe, T., & Ropp, S. A. (1997). The extended contact effect: Knowledge of cross-group friendships and prejudice. *Journal of Personality and Social Psychology, 73*(1), 73-90.

Young, R. J. (1985/1986). Methodology for community education study: How appropriate is cluster sampling? *The Journal of Experimental Education, 54*(2), 114-117.

Zeleznick, B. A. B. (1985). The effectiveness of bibliotherapy on changing fourth, fifth, and sixth grade students' attitudes toward the elderly. (Doctoral dissertation, Temple University, 1985). *ProQuest Dissertations and Theses Database*. (AAT 8509283)

Zucaro, B. J. (1972). The use of bibliotherapy among sixth graders to affect attitude change toward American Negros. (Doctoral dissertation, Temple University, 1972). *ProQuest Dissertations and Theses Database*. (AAT 7227216)

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